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#### PRINCIPAL CONTENTS.

L MATTER-" Chines Inborand Common sc. -The Question of a National Tanif. naidered . General Resumé of Results, etc., the Commercial and Industrial Press. 6 Prices Current and Weekly Review .... Matters-Mining. M Prices Current and Weekly Review .... nber Trade..... Money Market....

#### NESE LABOR AND COMMON SENSE"

gret to observe that in an article under the ading our esteemed contemporary the Montthrows its inducace in favor of the unre-Immigration of Chinese into the Dominion. adeavored to abow a fortnight back, there are o circumstances which threaten to increase gely the number of Chitase flocking into the province One is the new treaty between nd the United States, which the latter Governhas labored most assiduously to secure, for the purpose of relieving itself from the fetters of a treaty, under which Chinamen were allowed to the country in numbers unlimited and of obg back again what should never have been surred in the first place-the power of regulating. ing, and even prohibiting at discretion, the influx linese into the country. We pointed out the inent part taken by Senator Blazze in opposition binese immigration, and the importance to be hed to the fact that he is about to be called to ret position in President Garristo's Cabluct -that verod powers to the utmost verge that the new allows. Nor will there he any proventible in the matter, either, these freshly recovered es of the nation, to take measures for its own ert and safety, which as we say, should nover been parted with at all, in or by any treaty with Soreign power whatsoever, will be promptly exer-And this means, of course, that the tide of se hamigration, turned back from the shores of brala, will flow in upon British Columbia in magand volume beyond all former experience. The circumstance referred to is-the building of the coast section of our great transconuncatal y, which of itself would suffice to draw many en to our shores liallway contractors are bringing them over by thousands, and the season will certainly see the Chinese tion of British Columbia greatly aug-Already there are some tive or six ed of them in the Province; there will be ten hat many in it ere we know what we are about. It may be, and probably is the case, that the ktors made tice ngagements with the Covernon the understanding, either expressed or imthat they might avail themselves of cheap e later to build the ultramontane section of d. It therefore would not be fair to come upon them now with a prohibition, but it would site reasonable to enforce the condition that the work is done the Chinese shall be sent back plr own country. As we have before urged, the paing of a gigantic evil-the material for centu-

of a threatened gigantic national calamity, should would put fice Tradesentiment and theory aside for cost of transportation. But if we take from agriculfind expression in the editorial columns of such a a while and consider the learing that hard facts have ture the superabundant labor necessary for the paper as the Montreal Gazette. We would like to see supon the question at lesue. our contemporary reconsider the subject, and try to realize what the peopling of our Pacific prevince by Chinese actually means. It means, as we contend, the lowering of wages and the degradation of labor in Canada—the lowering of the standard, and status, and morals of our laboring population generally. While we are making it our boast that the honest working man, with no means save his two strong arms can attain in Canada a position better and higher up in the social scale than he can in the old countries of Europe, are we at the same time to swatop bim-to drown him out in all his efforts to the with the cheap labor of the "heathen Chines"? In this Dominion, we ask, to be a country of millions of laborers kept down nearly to the Chinese level as to remuneration and style of living, officered and drilled by a small number of wealthy capitalists and educated captains of fifties and bundreds? If so, then incewell to all patriotic dreams of a great British Canadian Dominion, inhabited from ocean to ocean by intelligent freemen of our own race. We observe that the Garette follows the writer of a recent American magazine article in the opinion that the actual population of China has been greatly overstated, and that the danger of an overflow into America is very small indeed. Now, we are not going to defend the traditional cetimate of four hundred millions, it may be that, as this writer contends, a hundred and fifty or even a hundred and twenty millions is much nearer the truth. But, while estimates of the population of such a vast terra incognita as China is (to us) may have to be received with caution, we are not without facts as to Chinese emigration in the past, which may help us towards reasonable estimates of what it may be in the future. Whether China really contains four bundred millions of people, or only half or a third of that number, we know for a fact that, to use the Malthusian phrase, population there presses fearfully upon the means of subsistence. This is the powerful force behind that pushes emigration forward. It is not among things doubtful and debateable at all, but a fact which we know, that during about the average lifetime of a generation past there has been a large emigration from China to America, and to the Islands of and material happiness of the masses. This is illusthe Pacific, tropical and southern seas. More ominous still, this emigration is not decreasing, or even stationary, but is, on the contrary, every year increasing. The poor Sandwich Islanders are even calling into action as they did, and concentrating as now at their wits end to devise means of saving themselves from being pushed out of their own homes of influence and authority we may be sure that annexation to the United States is looked upon as the necessities of the country, and which the inventors densely settled manufacturing communities of the rican Government will make use of its newly only hope. We may be sure that the new treaty, guaranteeing to the American Government the power of stopping the invasion of the yellow complexioned hordes, will give a fresh impeaus to the annexation movement in the Sandwich Islands. The native race. in danger enough of extinction through the invasion of white men and their exterminating vices, view with still greater dread the new danger from another quarter; and will jump at anything that promises to protect them from it. The Gazette appeals to the spirit of Christianity, and says it would be an insult to it even to hint at the possibility of the anti-Chinese sgitation being in accordance with its precepts. The Gospel is occumenical in its comprehensireness; why, then, oppose the very spirit of the Gospel by seeking to exclude the Chinese? We reply, nobody seeks to exclude them from the Gospel: on the contrary, let the Gospel command to go and teach all nations, China included, be both literally and in the spirit of it fulfilled. But is the significant fact that years upon years of trial and experience in California have failed to show any conversion of the Chinese laboring class from idolatry, when living among people of our own race, to be passed by as of no account? As we have before said, if upon a few thousands living amongst us our Christianity, such as it is, can make no impression, what hope have we of making impression upon a huge, compact mass of millions? None whatever, we reply; if the stolld, unimpressionable ris incrise of a few thousand so completely baffles our attempts to Christianice them, a mass of millions would be still more beyond our power to more There may be, nay, must be, if prophecy is to be of national corrow and suffering—is upon us: let fulfilled, a way appointed for the conversion of the tially an agricultural people, the first thought which wealthy and aristocratic classes, and which bear the up it in the bod, and at least put it under control Chinese people; but assuredly, as far as experience

country but their own, and of dreaming sentimental- who may be inclined to what we have called the teas-

# RESUME OF RESULTS.

Having, in our remarks under this beading, last week, disposed of most of the ordinary objections to a protective tariff for Canada, and explained to our residers the policy of the Government on this great question, as well as its beneficial results to the industrial classes, and on the general interests of the country, we will now lay down certain propositions in support of the above very important question. 1st. We submit that a protective tariff on foreign manufactured goods which can be produced under favorable circumstances in Canada, whilst greatly contributing to the encouragement of domestic manufactures, to the intellectual development and material happiness of our people, is identified with the agricultural, mechanical and commercial interests and general well being of the country. As to the first part of this proposition, that a protective tatiff will have a tendency to encourage home manufactures, it is so self-ovident that it will not be nocessary to enter into any dissertation thereon. When we speak of manufactures, we alluite in a special manner to such as can be produced under favorable circumstances in Canada. And as we have said before just as sure as water will seek its own level, will capital seek such investments as promise good remuneration. And what we lack in native experience and skill can easily be imported in the nest instance, as illustrated by experience in the United is the essential thing to be considered. For, notblates by the inducement of good wages and certain employment. We have in the Dominion, or can procure through commerce under equal conditions with other nations, all the elements and raw material necessary for the production of such manufactures as we require, and it will be our endeavor to convince the public that our interests demand the fostering of these industries at home. We will not detain our readers with any lengthy discussion on the next part of our proposition, viz., that manufacturing industries tend to the intellectual development trated by the almost innumerable inventions which by fostering domestic industries through protection because most of these castern commonwealths are have been given to the world by the United States, per necessity the finest faculties of the mind in the production of these scientific and mechanical inven- causes? The agriculturist in New England has a and into the sea by the influx of Chinese; and already tions, suggested by the various arts, industries and home market for all his surplus produce among the were stimulated to bring to perfection by the large Eastern States, and the corn which is burnt in Reassured. And as to the material happiness of the people, the great JOHN C. CALROUN truly said that the wealth of the individual as well as the nation always pre-supposed the existence of three sources, vis., agriculture, manujactures and commerce, although immediately derived from any one or two ot them, correctly observing that without commerce, industry would have no stimulus; without manufactures it would lack the means of production, and without agriculture neither could exist. When separated, he one who emigrates from her shores? Here in Canada said, they must perish. But when we come to the last division of our proposition, that a protective tariff I: ilentified with the agricultural, mechanical and Leneral well being of the country, we touch hard pan as it were. And whilst we hope to mass together an array of overwhelming convincing evidence in support of our proposition, at the same time we must solicit the most careful attention of our readers one thing we must bear in mind, that whilst European to our arguments, necessarily very condensed in the premises, well knowing as we do that no mere able, they are always uncertain and distant. If the cophictry, no mere individual opinion unsupported crops in Europe are abundant our market is correcby cogent proof, no mere speculative theories will have a tendency, will have the effect of convincing tures side by side with agriculture we establish a those of our readers who differ from us in their views home as well as a foreign market for our products. on this great branch of political economy, and whose But why in an especial manner is the agriculturist studies of this science have imbued them with conclusions different from those we have formed, after a among almost the entire farming community the very devoted examination of the relative merits of class of goods entering into their consumption is ex-Free Trade and Protection, of a protective as against a sluded by the tariff, and, as a consequence, is proso-called revenue tariff for Canada. And first as to duced better and cheaper at home. 2nd. The expenagriculture. On the assumption that we are cesen- sive luxuries which enter into the consumption of the suggests itself to our consideration, to our reflection, brunt of taxation, not being used as a general rule by

ries of cosmopolitan Free Tred re, the friends of every that the Gazette, and all others of our contemporaries closed by its tariff; that of foreign countries except for cereals, which are so exhaustive to the soil, is ists, who look with a light heart upon the beginnings table sentimentalist view of Chinese immigration, most uncertain, and to a great extent marred by the production of manufactures we require, we establish for ourselves a home as well as a foreign market, which will be at times certain and remunerative and THE QUESTION OF A NATIONAL better than the foreign market. On the assumption TARIFF CONSIDERED-GENERAL that the inhabitants of each country should confine themselves to those branches of Industry for which their situation is best adapted fastead of diversifying their arts and labor as, for instance, suppose Russia, United States and Canada, essentially agricultural countries, were to confine themselves to this branch or industry and sell their products to manufacturing countries, what would be the result ? A rulnous competition would arise, and the sale of their products noder favorable circumstances would, to a great extent, be regulated by their distance from the seaboard, for the transportation of grain from these countries east of the Volga, west of the Red River or the Saskatchewan, will involve such cost as to greatly, if not altogether, render their production unprofitable. Thus we have seen the farmers west of the Mississippi burning their grain for fuel, having no market wherein to dispose of it, until by the establishment of manufacturing industries side by side with egriculture emigration was invited, population increased, and a home market established. The free trader may say why should I-why should the industrial classes of this country be compelled to pay more to the home than the foreign manufacturer for such goods as they require? Firstly, we invite his attention to the revenue question, Secondly. In reply to the above, we answer and distinguish, they may for a time bave to pay a little more money, but, mark the more immortant fact, they will not have to give the product of more, nor as much labor, which withstanding the inaccurate and distorted figures of Mr. Watts, in his great speech before the Cobden Club, we fied, on most careful examination, analysis and comparison, that the purchasing power of the industrial classes in the United States, under a high protective tariff, is as great, if not greater, than those of any country in the world.

Now, we ask our readers to glance at the New England States, where manufactures, where diversified labor, are the distinguishing characteristics of the people, and what do we find? That one acre of land there is worth two in British America or the Western States? Nor will it be a sufficient reason to say it is located on the Atlantic seaboard. The same comparisen will apply between Massachusetts and Virginia as between Connecticut and lows. What is the brasks and sold for 20 cents in Dubuque, Iowa mands 55 cents in Boston; and it is the same with regard to almost all other products of the soil. But as we have said before, what better libetration does the public want that the laborer-we include in this classification the members of all branches of industry-has a greater purchasing power in the United States than in free teads countries, than the simple fact that one hundred emigrate to this high tariff protective Republic from free trade countries to the during the Mackeners regime, in a comparatively free trade country, enjoying, as far as liberty and safety for life and property are concerned, one of the best Governments in the world, we find that about twenty of our fellow-subjects emigrated to the south side of he St. Lawrence to the one who came over from he United States to settle on its northern shores, and markets are at times remunerative, at others unfavor. pondingly depressed, whereas by planting manufacbenefitted by a protective tang? Ir. the first place it becomes too strong for us to handle. We say shows, deporting them to America and the scattered is, what market have we for our surplus agricultural the great mass of the agricultural class, they escape wery much to be regretted, indeed, that the theo- islands of the sea is not that way. We heartily wish products? That of the United States is almost these burdens. 3rd, The tariff creates a home market

for their wood, for their batter, where a word, in fact, will have a ten lengt to make a return outer on the St Lancin e and the Atlantic. And traordinary prolific character of her peorie, to I rais their productions, to the reased prochasing | good thank of that or i promite the mark and the mark, rain lation is gradually decreasing. But again to power whi hit given to the nearly who derive emergence of a part what in the sum and a contract the street made face to take, what is the sum and a contract the forment from its office, by the indication which in office that the organity of the first and a sport do no of the principles of free traders of such good, proment from its office, by the industries which it story and restrict that the conjugate of the industries and the industries and the large can nature processes and the industries and the large can nature processes and the industries and the large can nature processes and the industries and the large can nature processes and the industries and the industries and industries and the industri geher in the thirty and elected the entire of the tariff on the entire to the branches and the factor of the tariff on the entire to the branches and the factor of the tariff on the entire to the branches and the factor of the tariff on the entire to the branches and the factor of the tariff on the entire to the branches and the factor of the tariff on the entire to the tariff on the entire to the entire the ordinary claused groups to grate enhance their the first both States that while the ramifactioning to ordinary much the volume of apital dustry for which nature has best acres to g are, but to ex 1 for the rain for a manufactured state of the test floring entitled a congarative apending, for blider more deformed to m, to detect domestic alteration, and that the desire for gain, the are and carry the me to be produced an home to be the the production the production with a narrate to record the state of the production, their own interests, will naturally lead them as co 9 ship addat how a price. Eversthing on the aboye I tried districts and non-mann a turing cotters. The grants and hands share had as it were, from the same those branches or industry which are a et age, ultural En eige, try, all classes of wearing are configered in the Restrict Germany Austria etc. In modernie it information and galactical profitable, most conductive to their own wells. greed entering fact, their general consumption, are (feen overed ming whiter France, English and the Internal form a kultimery and strongth that seems This theory is unsound. It would be morally in ... made sa well and chosp to Carada as in any part of Unit 1 States retain to a great count, their copie formed in so fried a period with the voice of sail le for the inhabitants of the western hemony. the world, while owing to the large conditing latton. It is not, the result of the most akil'd the people at an hors terms election endorsing the establish manufacturing industries in congremodium which Protection has created, money with hearthank of Europe and Great Britain have emigrated by dict of the and even assing on additional lash to with those of Great Britain and Europe, in the formerly could only be estimated to the former at an his to the United States, but what has been the attracts of instance, without Protection their come, . . runous rates as to and 12; per cent, is now abute, which induced them? The high wages which the the conserve u of Democrats to Indicate tion, as itlus- renown-cheep superalundant labor and conserve u of Democrats to Indicate tion, as itlus- renown-cheep superalundant labor and conserve u of Democrats to Indicate tion, as itlusdust at from 0 to 7 per cent, and the farmer has a tariff enemred them, whilet the athetitution of man trated in the regulation by its leader of the Free would crush out any unprotected, incipient ash market for all the products of the soil. For the chinery for manual later and domestic competition Trade plank of its Concernate platform, in view of tries. The only way to establish them on the first time in our recollection dairy produce was protected the consumer. But why, under a protective reason, logic forte and popular opinion, in face of the basis, the only way to invite capital, is to group a quoted higher the full and summer of 1989 to Mon- tatiff, will the same results from to Canada as to the united opinions of the great fathers of the American a certain market and a fair remnueration to the treal than New York. But again, what other results United States? Because we can give the laborer, the republic, and the best considered opinions of her manufacturer. The lostering, the creation of their has this tariff? It attracts skilled labor to our artisan, the mechanic, cheap goods, cheap homes shores as it did in the United States, and the result is to-day that in the New England and Middle States healthy chimate, boundless recourses, all the elements and material triumphs which have glorified the his- physically and intellectually being the equals are the same and the same are the same and the same are the same are the same and the same are they are manufacturing cotton and woulden goods, necessary, with a protective tatiff to make Canada tory of manufacturing nations, in contrast to that of other people, there is no reason why we cannot to hardware, sooden ware, watches and machinery of all one of the greatest emigration marts of the world those countries which import rather than produce proper conditions, rival them in the perfection will hinds at almost as low rates as they can be imported. whilst at the same time they are rivalling the most skilled nations in Europe in the perfection which, they have attained in their manufactures, and one very important feet we wish to impress on our readers s that in the Eastern States where they are paying the highest price for labor, the highest price for agricultural produce, they are paving the lowest price for manufactured goods of any part of the Republic, producer as a consumer, in all respects, he adds to and reward the men who, by a single stroke of genius We make these frequent allusions to the manufacture ing districts of the United States because the same arguments which are applicable to them are equally so to Canada. But here let us offer to our readers another illustration of the effects of a protective tariff on the price of foreign manufactured goods. When the first Bestemer steel furnace was opened in the United States under the protection of a high specific duty on foreign steel ralie, what was the selling price of the imported steel rails in New York? \$150 !! per ton! Within one year after they sold in Chicago for \$115 per ton, and the best domestic rail, now made in the Republic at Cleveland, Ohio, and which is equal to any rail in the world, is now selling at \$45 per ton, and has sold as low as \$37.50. whilst the steel rails in England fell before foreign competition to £4 5s., f.o b. Liverpool, which was the price we believe at which his CHARLES Topper manipulated his judicious and adroit purchase. So sensitive was the English market, that when on the morrow of that purchase it was known that a contract for 50,000 tone had been closed, the price advanced £1 per ton, and soon went up to £6 10s, per ton. Last year in the United States some 600,000 tons of rails were produced. What effect would such a demand have on the English market? Does anyone suppose that rails could have been purchased as low as at Joliette or Cleveland for \$45 per ton? Ask the Ministers of Railways under the Machonald-Carrier and the Macketzie-Cauchox Administrations, and they will tell you the current rates in their days! And in connection with this industry we may my that It is asserted by the great Iron Journal of Philadelphia that some \$55,000,000 were paid out for labor in 1880 in the United States. The best root sugar presents another instance of what protection can do for the agriculturist. When France, under force of circumstances began to produce sugar from the best she imposed a duty of 55 france per quintal on foreign sugar! It cost in the first instance 16c. to produce a of Europe. We must protect our incipient industries, industry. What has been the result of the unequal tariff of 1879. That the same cheers of the multipound of sugar, science, industry and patience came therefore, as we would the exposed points of our coungradually to the rescue, and to-day France is productery, and we shall do so until they are firmly estab. To pauperize her labor market, realize a balance of loyal acclamations which everywhere ing annually over 600,000,000 lbs of best root sugar at a cost of 5c per lb., and even submits to an import duty on it. She produces the best sugar in the world, and the cultivation of the best has enriched the soil in a manner never before dreamt of. We therefore of such a policy must bend to the irresistible; if sands and hundreds of thousands emigrating from deduct the following conclusions from the reason. ings which we have submitted in connection with the first proposition, and the arguments which preceded it:-ist. That a protective tariff will juvite capital, establish industries, diversify labor and enrich the general population of the country. 2nd. That the price of manufactured goods being governed by the cost of production, domestic competition will protect the consumer, capital and industry, naturally seeking such channels as promise good remuneration. 3rd. That a protective tariff does not enhance the price of goods to the consumer in proportion to the duty imposed, the toreign manufacturer being governed to a great extent by the duty he has to contend against. 4th. That if for a time, we have to pay a little more money for certain classes of imported goods, we do so with the price of less labor, which is the essential point to be considered. 5th. That manufacturing industries tend to the moral and intellactual development of the people, and general well. being of all classes of the community. 6th. That protection promotes the agricultural, mechanical and commercial well-being of the country, as illustrated by the comparison between manufacturing and nonmanufacturing countries, by the recults of limited and diversified labor.

We now pro end to lay down our second proposition relative to the effects of a protective tariff on the general well-being of the country, v. that it winter, we will build up two great commercial Whereas, under free trade, notwithstanding the ex. 000 in 20,000 shares of \$100 each.

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good wages. We have an excellent constitution, build up national industries, in face of the social the development of the resources of the country go We have enough water power along the hanks of our their own requirements, is it not, we say, to be they have attained in their manufactures. It we canals to grand the grain of the West, and yet from regretted that this same party have not the moral Valleyfield to Beaubarnois we have scarcely a rouge stones in operation ! If we want to attract the surplus mysiade of Europe to Canada we must plant manufactures side by side with agriculture. It is not neces- the courage to acknowledge this, then we should have sary to expatiate on the value of the emigrant. Apart | glorious instance of a sacrifice of party to public good, from the capital which he brings to the country, as a to public welfare, and Canada will bless, applied the wealth of the country. During the last year of and determination, have the courage to cut the Gorthe Mackesia regime we imported some \$15,000,000 dian knot and remove from the arena of politics this worth of manufactured goods which we could have great fiscal question. produced under favorable circumstances ounelves. Had we done so, had this vast sum been retained in circulation among our own people, money would have been abundant, our markets would not have manufacturing industries in new countries is the been flooded with foreign goods, the crisis through which we ressed would not have overwhelmed us, and an era of prosperity instead of disaster would have rewarded our industry and crowned our aspirations. Some hard-headed Tory Free Trader may still ask why this Protection, why the necessity for this glance at the statutes of Anne, William and Mary, fariff to build up domestic industries? We answer, is it to be expected that from the outset we can compete with Great Britain and Europe, which have such cheap labor, perfected machinery, accumulated capital and commercial renown? Certainly not. But if we can say to the British and foreign artisan, we will give you better wages, cheaper and better food. a free homestead, an excellent chance to improve tal, thesp labor, great natural resources, perfected your social and material condition in life, we will raise you from comparative penury and want and give you comparative affluence and abundance, we will soon attract the best skill, which will educate our ladustries until they no longer needed protection, then rising population, retain in this country the millions we have been annually sending abroad for foreign and advocated free trade, when she was in a positon. manufactured goods, sucking, as it were, the life. to crush foreign competition. But the political blood of the nation, stunting our growth, limiting our intellectual development, and obstructing the that she is having free imports but not free trade to-day growth of a diversity of industries, which should be in most respects. The United States erects an the strength, the greatness of the Dominion. Today we are paying 35 per cent more for mechanical and skilled labor than in Great Britain, and with all opens her ports to the American artisan, agriculturist kinds of food cheaper here than there, it must appear and laborer in all branches of industry as wide as that the intelligence, the patriousm of the repreself-ovident that the purchasing rower of our indus- they will swing. Mill. Smith, etc., have been evangel. trial classes is greater than those east of the Atlantic. Izing a doctrine of free trade--not free imports. They Every artisan in Canada under the segls of Protection never contended that it was a wise politico-economic can become the owner of his own home, the lord of policy for England to open her markets to foreign tariff of 1859 would become as they have becomelished, and we trust that then they will need no pro- trade of \$700,000,000 against her in a single year, tection. Self-interest must be the criterion which force her to adulterate her manufactures under pressure will characterize our tariff. The voice of a past of foreign competition, whilst she beheld factory suffering people proclaim it about, and the opponents after factory close, bank after bank collapse, thouthey will not bend they must break! Through Pro- her shores. Whilst the great Republic of the west, tection we will husband the capital which we sent on the one hand, gloried in a balance of trade of abroad to build up foreign labor by expending it \$305,000,000 in a single year, paid off \$700,000,000 of among our own artisans, and retaining it in our own her debt in twelve years, saw her 6 per cent, bonds country. We will husband capital by inviting, rise from 40c, on the dollar in 1864, till her 4 per through protection, thousands of artisans and agri- cents are quoted at 112 in 1880, and at the same time culturists to supply our domestic wants. Estimating her internal commerce attained such gigantic proan annual emigration of 10,000, and crediting each portions that between Philadelphia and Pittaburg emigrant on the average with \$100 of imported more tons of freight were carried in a year than the capital, we have the large addition of \$1,000,000 per annum added to our wealth and circulating medium. And gradually, as we reach perfection in our manu- article in the Pall Mall Gazette, the writer mys Hir factures, we will be able to husband capital by ex. John Macdonald is attempting the bold experiment of porting to South America, the West Indies and other countries, manufactured goods, which we can produce under favorable circumstances, after the example of the United States. Reciprocity, which was recently looked up to as the only life preserver of the nation, we now no longer pant after, in fact, we are independent of it. The price of agricultural produce in America is regulated to a great extent by the produce exchanges of Liverpool and London, not New York or Boston. We have as g sat facilities for our unanswerable proof on this point in favor of proteucarrying trade from Montreal and Halifax as from the shipping ports of the neighboring republic, and or the industrial classes in America and Great Britain with every dellar's worth of imported goods entering and Europe. The population of Ireland under leton Place via the towns of Peterborough and Perth,

greatest state amon in favor of a protective policy to dustries will naturally originate invention, process courage to acknowledge that their past fiscal views were wrong, that Protection to our incipient industries is the necessity of the hour! If they only had

The great standing objection which Free Traders urge in reply to all arguments, all demonstrations in favor of the necessity of Protection to build up great triumph of free trade in England. Let us ask these so-called Free Traders how England built up her diversified labor, her manufacturing industries? Was it not by a protective-was it not by a virtually prohibitory tariff? If any one doubte this, let him and the Georges' Let him read the statutory enactments in favor of the woollen and iron trades, the ship building and commercial interests, and other industries of the country. Take the item of Iron which, as we said before, was protected from 7s. 6d to £28 per ton from 1717 to 1828. But when England through protection, through the vast caplmachinery and commercial renown, was in a position not only to compete with, but also rival most nations of the earth, when she had, in a word, protected her she threw open her ports to the markets of the world economists of England should learn one great fact, almost prohibitory tariff against anything which England manufactures or produces, whereas England the total imported from abroad, and yet all this was done under a high protective tariff. In a recent peopling the North West under a protective tariff. Let us ask the editor of this journal how the United States under an almost prohibitory tariff attracted to her shores nearly 600,000 emigrants in L. R. Church, Hon, J. R. Thitaudeau, Duncan the past year? It is protection which ensures remuneration to, and employment for labor, and the best evidence that the consumer is not unduly oppressed is the fact that the United States and Canada are becoming exporting countries. The most clear, positive, tion, is the relative, social and material conditions this country, destined for Canadian consumption eighteen years of protection and subsidised industry, with power to construct a branch line to the town of passing through Montreal in summer, and Hallfax in viz. : from 1782 to 1800, rose from 3 to 8,000,000.

want manufactures to enrich the people, if we want diversity of labor to develop the moral and interior. tual faculties of the people and promote our socia and meterial happiness we must take the means to catal. lish them, otherwise we cannot have them, and to country in the world is better adapted for the ... ductions of such manufactures as we require that Canada! We need not trifle with the Intelligen en our readers in arguing that the masses if left to themselves will naturally seek such employment 4 is most conducted to their own interests Such a proposition requires no rejutation, and although nature may have specially adapted Canada and to-United States for agriculture, so has she furnished to with all the material necessary for the supply at almost all our wants. We accept, we pront by the works of nature when they are adapted to our artis. tion, but we improve on them when our interest demand it. We build capals to pass our raging rapids we span our rivers to promote domestic commerce. we plerce the mountain side or bridge the moon. tain gorge to let pass by the lightning car We turn saide our streams to feed our mills and factories, we make nature subservient to our own raquirements, bend to our wants-irrespective of all obstacles we take the means to attain our dearest ends. So also must we do if we desire manufacturing industries, the creation of a diversity of labor, the development of the moral and intellectual faculties of the people, their social and material happiness, if we wish to attract to our shores the labor of the shilled artisan and the gold of the capitalist, if we was to invite emigration, retain and establish on a nim basis the happiness of our great Dominion. Nee' we say that we rejoice to see that the intelligence, the patriotism of the people is everywhere aroused on this great question of protection. That it has assumed the form of a national instead of a sectional isens, and how right well did the people of Canada anticipate that when the leader of Her Majesty's Ministry opened the flood-gates of his intellect on this great branch of political economy sentatives of the people would bow to the force of his logic, that the flames of our manufacturing industries which were fauned into existence by the his own castle! He is a superior man to the artisan countries whilst they barred their gates against British more resplendent, more brilliant than ever under the framers of Confederation would be re-school from the Parliamentary benches at Ottawa, and that under a Protective Government we would receive a tariff which would give, as it has given, bread to the artisan, remuneration to capital, happiness to the great Dominion of Canada.

mlo

Tun following is a comparative statement of the duties received at the Inland Revenue Office, Ottawa during the month ended January 31st, 1881, and cor-

respading month of 1880 :--Spirite Tobe 3,770 70 580 64 106 10 26 84 \$12,700 56

Tas persons who seek incorporation by the t-lift introduced by Mr. Cameron in the House of Commons (Victoria), to incorporate the Ontario and Queter Railway Company, are Mesers. H. S. Howland, Hon. McIntyre, A. B. Chaffee, C. J. Campbell, E. D. Osler and W. H. L. Gordon. The bill provides that the company and their agents and servants may lay out. construct, finish and operate a double or single line of rallway from the city of Toronto, in the Province of Ontario, through the counties of York, Ontario, Victoria, Durham, Peterborough, Hastings, Addiagton, Frontenac and Lenark, to a point at or near Car-Lanark. The capital stock of the company is \$2,000,-

### EDITORIAL COMMENTS.

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A New lighthouse is to be erected in Belleville IMI-01

To tumber shipments of Chicago in 1879 were 15 cc ( 23), and last year, 815.627,591

Tirelectric light will soon be Introduced in the at Sactoring establishments of Montreal.

T a outlook for building operations in Montreal price the coming season has not been so bright for

It is expected that the Finance Minister will make at objet speech on Tuesday next. It is anticipated th wurd interest

A representation from Halifax waited on the Minister Railways a tew days ago and conferred with him the winter port question.

nada continue to show a considerable increase over presponding weeks of last year.

According to the report of the Minister of Justice, re were 1,273 convicts in the penitentiaries of the minion on the 30th June, 1880.

In several of the State Legislatures bills have been polaced, fixing the rate to be charged for berths in of a similar nature. sping cars. This is the result of exorbitance.

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i Parib, town of \$2,900,-

in the Senate. The subject was so comprehen- States :ely delated in the Commons that little of a now sure was left to be said.

CAPTAIN PREVOAT, of "A" Battery, Quebec, has salled England, with instructions from the Government order the necessary machinery for the manufacture email arms and ammunition in the Dominion of

DEFITATION waited upon the Premier of Ontario week in the interests of the Kingston and Pemhe Rallway. Mr. Mowar promised to take their resentations into consideration. It is stated that deputation sound the feeling of the members of Legislature adverse to voting any more bonuses at

ne tourth report of the Joint Committee of both sees on Parliamentary printing was presented a days ago by Mr. Wallace, Norfolk. The cost e printing service of Parliament for the year ing 30th June, 1880, was \$50,727.65, being a case in the year's expenditure of \$11,246.86 as spared with the previous year.

appears that although Brazilian coffee makes up rop of 260,000 tons in the country.

far upright plane manufacturing firm of G. M. pra & Co., Kingston, have removed to more exten-

New York exchange says that through railroad It is estimated that the passenger traffic of the j ration eleven years and eight months The numof passengers arriving at and departing from San notice during that period was .- Arrivals, 507,001. artures, 311,230. In 1870 the population of Callila was 5.0,000, In 1880, 866,000, a gain of 306,000, which, it is estimated, nearly 200,000 is supposed be due to the existence of railway communication.

certiska to the Britist, Board of Trade returns for is a comparison of imports and exports for the rs 1878, 1879, 1880

Imports, \$1,443,044,000 1,810,034,000 2,849,950,000 Exports \$914,245,000 957,678,000 1,114,052,000

lle these figures show that the imports exceed the orts, United States trade returns for the same foi show a large excess of exports over imports:

1474. 9431,912,000 1879. 513,602,000 1890. 000,503,000 \$742,928,000 713,311,000 889,600,000

lantcatter of the increase of cotton mills in New England it is stated that since 1870 their capacity has increased from 114 900 looms and 6,408,600 spindles to 185,700 Ioonas and 8,800,600 spindles, and cotton consumption, which in 1910 was 278,639,0 0 pounds, was in 1 000 no less than 500, (12,000) And the same authority states that in the South in 1870 there were to the commenciation of Juniars, since when trade 11,000 looms and \$17,000 spindles, while the cansus has been rather quieter. shows that in 1880 there were 15,000 looms and 714,increased from 15,000,000 pounds to 102,000,000 Comparing the two sections, it is seen that in ten years New England has increased her cotton consumption atout so per cent and the South over 120.

Ms. White (Hastings) has introduced a bill in the House of Commons to Incorporate the Canada Gold Mining Company (already incorporated under the general laws of the State of New York), they having agreed for the purchase of certain gold mines in the county of Hastings. The association known as England, apply for incorporation in Canada to enable This weekly returns of the Railway Companies of them to carry on the business of producing, manufacturing, drying, curing, preserving or preparing corn, meat, game, fish, fruit, vegetables and other articles of tood or provisions, and of dealing in any auch articles, (whether dried, cured, preserved, or prepared or not) wholesale or retail, and of producing, manufacturing or dealing in such articles as are usually or may be conveniently manufactured or dealt in by companies or persons carrying on a business

THE Real Estate Record publishes the following Tax Pacific Railway contract bill is under discuss figures, illustrative of the prosperity of the United on the business.

Immigration	177,820	457,213
tion and silver im-	\$86,548,140	75,548,771
Merchandise, ex-	\$751,761,204	871,666,346
Merchandise, im-	\$455,516,165	709,029,302
Exports over im-	A230,245,038	162,637,044
Railroads built,	4,721	7,207
Railroad earnings.	\$150,000,000	210,000,000
Wheat crop, bush-	449,755,000	480,850,000
Cutton products	5,073,531	5,757,297
Iron produced,	2,741,853	3,300,000
Coal, anthracite,	24,142,699	23,600,000
Gold and alleer produced Coin and currency	\$71,163,731	73,527,545 1,400,000,000

#### SPECIAL NOTICES.

THE CLYDE WOOLLEN MILLS.

(From our Travelling Correspondent.) LANARK, 2nd February, 1881.

One of the most completely finished woollen mills in this section of the country is that of Mesars Boyd Caldwell & Co, of this village, and there are few, if any, that turn out a better class of goods of the kind of which the firm makes a specialty, viz., Cheviot at one-half the quantity produced in the entire fluished tweeds. By the kindness of Mr. Boyd Caldd, it is of so little account in the markets that, well, an Industrial World representative to-day had an opportunity of making a brief tour of the establishment, and gleaned the following information. The Mocha produce. There are no fewer than 630, mill was retablished in 1867 by Caldwell & Watchern ,000 plants, covering 1.500,000 acres, and yielding and has continued in operation since that year. It is a spacious and substantial atone building, three and a half stories high, and is 136 feet long by 45 feet wide, and gives employment to from 68 to 60 men and women, all experienced hands, and who necessarily form a considerable item in the population of the premises—the old Medical College. This is the alt of the increase in their business. The Why kind adapted for turning out the high class goods for "The castors, pedals and plated ware are ob- which the firm is so well known, and is driven by a latter more anon On the first floor is a spacious graph of a letter Mr. Albert Fink has recently written on the main apartment in which sixteen isoms are kept constantly at work, also a warping machine, a steam brusher, at work, also a warping machine, a steam brusher, at work, also a warping machine, a steam brusher, at work, also a warping machine, a steam brusher, at work, also a warping machine, a steam brusher, at work, also a warping machine, a steam brusher, at work, also a warping machine, a steam brusher, at work, also a warping machine, a steam brusher, at work, also a warping machine, a steam brusher, at work, also a warping machine, a steam brusher, at work, also a warping machine, a steam brusher, at work, also a warping machine, a steam brusher, and the Governous are the Louisville and Nashville Railroad the State on the Increase of the Equivalent of the Louisville and Nashville Railroad the cost per freight ton mile in 1873 was 1.44 cents, and in 1870 it was 0.767 cent, showing a reduction of 45 per cent. On the Pennsylvania Railroad the cost per freight ton mile in 1873 was 0.880 cmt, and in 1879, in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may be sure. With a grow-in the burden of its debts we may b the increase of the receipts of January, 1881, over see of 1880. In Montreal alone the increase of the Davis & Furber make, and in the first as receipts for January of this year was \$177,588.97. s Inland Revenue receipts of that city for the 280 spin first with 120 spin first with where the wool is sorted prior to going into the hands ic between San Francisco was inaugurated in May, of those who transform it into fabrics. In this room is a picker and a burring machine, of American make and each seemed to do its duty to perfection. Returnright months of railway operation was 20,000 ing to the store room, your correspondent was shown valuable of the road has been in a vast quantity of cloths of the Cheviot finished make, of which, as has already been said, Messra Boyd, Caldwell & Co make a specialty, turning out from 110,000 to 120,000 varies annually. Nothing but Cape and Australian wool is used in the mill, and that fact, combined with the excellent workmanship, is suffi-cient to command always a ready market and a good price for the goods. The patterns are very handsome, and are from the designs of Mr. Breckenridge, in whose charge the internal economy of the mill is, and who deserves credit to da very excellent taste ldes of the estimation in which Messre Boyd Caldwell & Co's clothe are held mar be formed when it is stated pear business is steadily improving. The follows that at the Industrial Exhibition at Toronto they the Dominion Exhibition at Ottawa they gained a ailver medal Your correspondent has to thank Mr. J. H. Bothwell, the courteous gentleman who has charge of the office for his kindness in acting as

#### GENERAL COMMERCIAL NOTES.

-Mears Haggart & Cochrene, of St Thomas will make a large shipment of agricultural machinery to Manitoba in a few days

- The country storcks speed even in the wilds north of Perntroke, have been doing a rushing furnition, up

...The wholesale house have a large number of 690 spindles, and that the con-umption of cotton had travellers out with samples of spring goods. All report thereased from \$2,000,000 rounds to 102,000,000 baving sold larger bills than this time last year. Dry goods men are especially jubiland.

... The Oshawa Calenet Co are full of orders at prebe the and have recently opened a branch warehouse by Montreal. They have a larger force of hands one floved, and the various departments present a very

-Some enterprising business men are already "J. Winslow, Jones & Co", already incorporated in speaking of making a move towards Callendar Station, on Lake Niplasing, which they look upon as being likely to prove a good location as soon as the western extension of the Canada Central Railway is completed to that point

-The Treasury Department announces the following as the coinage at the United States Mints during The actual time of loading was 74 hours, and in 45 of the month of January, 1981: Total number of gold which was taken the grain bulk, making two-thirds pleces coined, 1,106,053, value, \$7,262,930, silver dollars, \$2,300,000; cents, number of pieces, 2,030,090; value, \$29,300

-Mesara Brown & Baker's rake factory, burned last week near Waterdown, was insured for \$2,300, which does not nearly cover the loss. A committee of the village ratepayers called upon the firm to see if they \$500, and exemption from taxes as long as they carry

-Mr. J H. Stone, of Hamilton, intends, as soon Mr. J. H. Stone, of Hamilton, intends, as soon as the weather will permit, creeting a building 130 ft. by 30 it. and 3 stories high, and he calculates to have it ready for occupation by the 15th April. He will manufacture railroad and ship lanterns and signals, a full line of spun metal goods, lamp burners of overy description, and many specialties that have not been have after a manufacture to formed. heretofore manufactured in Canada.

-Thos Graham, file manufacturer, of Toronto, commenced business in a small way about six years ago, employing one man and a boy. Since then the business has gradually extended, and he now gives employment to ten hands. He experienced an inference manufacture of the state of the second of of fully 25 per cent. on last season's trade, and is now enlarging his premises, and will have, in a short time, every facility for the manufacture of new files and for re-cutting old ones.

-Mr B Macnamee, the contractor for the Welland canal works, says that the operations will be completed and the canal ready for opening on the first of May next There are 800 men, besides every description a steam machines, employed in the pushing forward of the works with all speed. hixty new gates are already finished, and the twiance of 110 will be ready about the first of April. When ready for opening there will to a draught of 12 feet of water throughout the

-There was considerable excitement in commercial circles in Toronto lately, when it was announced that the long-established wholesale dry goods house of John Robertson, Non & Joy 24 and 20 Wellington street west, had suspended payment. The firm has been in difficulties for some time, but it was hoped they would be able to tide them over. The business community has not been slow to express its sympathy with Mr. A. J. Robertson, who has done his best to with Mr. A J Robertson, who has done his best to carry the business through World

-The A G. Whiting Manufacturing Co., of Oat va report a largely increased business, having sold more goods last year, in Canada, than they have usually turned out for their home and export trade combined About nine months ago they put in a Brown engine, of 70 horse-power, manufactured by the Thompson & Williams Co of Stratford, so as not to be entirely de-pendent on the water wheel, which previously furnished the motive power. There are about 80 hands en-igaged in this industry, and are all working full

-Another illustration of the rapidity with which

factory is now being pushed forward with considerable vigor. A number of new machines have been set up, and will be in operation in a few days, employing additional hands. The plating department, the moulding shop, machine shop, etc., are in operation, already employing quite a number of bands. From forty to sixty forms per day are turned out in the moulding shop Amongst the work done in the plating department, is a lot of silver plated goods for Fawcett's foundry, Sackville, and amongst other order work is a

branch of our exports is as yet only in its imbryo state. The shipments of phosphate from Montreal to The Greck Picmier spoke more moderately regarding Greece's prospective action on Saturday than he lias hitherto do: It is reported that Mr. Goschen arrived at an understanding with Bismarck during their previous year. Next season is expected to witness retained in Western recent conference on Eastern affairs.

pling to be b tter known in the husepean mark ta-A great many of the objections to Canadian phos-phates on the other side are gradually wearing away, so much so that English capitalists are now seeking investments in our mines. We have to report the sales during the past few days of 560 to 780 tons of creen phosphate, rearanteed 80 per cent, at \$13, delivered on cars at Buckingham station, QMO & O Ruliway."

#### THE FIRST GRAIN SHIPMENT FROM HALIFAN

The barque Cleft, of Dunder, Herd, master, which arrived here from Manilla with a cargo of sugar for the St. Lawrence Rebning Company, Montreal, has the honor of taking the first cargo of grain slipped from Halifax She cleared at the Custom House Litely with 38,500 bushels The fact of the Chili taking a busy appearance
—The trade in butter for exportation has been excellent this season along the St Lawrence, the Ottawa and Rideau rivers. One dealer at Burritt's Rapids turned over \$16,000 worth in a month. The dealers in Perth have also operated extensively this book of Rapids turned over \$16,000 worth in a month. The dealers in Perth have also operated extensively this book of Rapids of Rapid lished, and Capt. Herd says that he would rather come here again to-morrow for another cargo than to Montreal or any other port on the continent. He says this is the cheapest port on the continent, and the dispatch in discharging and loading here have equalled any-thing he ever had at any port. The cargo was given him as quick as it could be stowed, and the quantity in bags was sent down quicker than it could be taken of the whole cargo. There was no detention in loading. Capt. Herd states that the facilities for loading ships with grain here are ample, and for the reasons above would strongly advise vessels to come Lere Measts. Lord & Munn, of Montreal, are the shippers of this cargo, which was forwarded from Detroit rea the Grand Trunk and In ercolonial roads, occupying would rebuild if a bonus was offered. Their report about ten days in transportation. It was brought was fav rable, and the village decided to grant the firm down in ordinary box cars and sluiced aboard ship by an ordinary coal shoot with a special weeden casing by an ordinary coal shoot with a special weeden casing to prevent waste—just as antisactory and good a man-ner as wanted. The advantage of an elevator would be the additional facilities in loading and atowing, as every one acquainted with grain shipping knows, but, particularly the stowing of grain for retention, so having a supply ready for shipment at any time, and the retaining capacity of what is not wanted for immediate shipment, for which if there had been a number of cars too many arrive, we have at present no provision.—Halifax Chronicle.

#### THE DEBT OF CANADA

It is an expensive business to run a young and ambitious country like the Dominion, which has a great career before it. When Confederation was car-ried, it was spoken of as "a nation born in a day This was a premature announcement. It is still going through the throcs of birth, but they will result in the production of a vigorous nation yet. The piling up of debts may be called throes, painful but necessary. In the thirteen years since Confederation, (the first step, we presume, to nationality), the debt of the Dominion has increased something very close to a sum of \$108,000,000. In 1807 the total debt was \$100,of \$108,000,000. In 1867 the total debt was \$109,125,323, so that it has been more than doubled in the
short period since the act of Union took place. Sir
Alexander Galt, our High Commissioner, stated, last
week in his lecture on "the Future of Canada," before
the "Royal Colonial Institute, that the 3-bt of
Canada on the 30th of June, 1889, was £41,000,000,
(close on \$200,000,000) Some of his hearers, familiar
with the hundreds of millions of European national
ideals, may have thought that flutter insignificant. delts, may have thought that figure insignificant. There may be some on the other hand who think that Canada's 40 millions are, in proportion to its wealth and population, as burdensome to it as are thoir seven hundred millions to the British Neither are the 40 millions an insignificant debt for Canada, nor do they millions an insignment deci for canada, nor do they we believe press so heavily upon its people as their enormous debt do upon the British. Canada's debt has not been caused in great part, like that of the British, by extravagant war expenditures, which have left no visible evidence of usefulness behind, but by expenditures on canals, railways, harbors, lighthouses. public buildings, etc., works absolutely necessary for its development. No doubt some of these works have cost the Dominion more than they ought to have done, but extravagant expenditure on public works is a vice to which all governments are liable, and the country may be congratulated that the gigantic Pacific Rali-

#### THE PROPOSED GLUCOSE MANUFACTORY.

At a meeting of the City Council held on Monday owning last, a letter was read from Mr. U. J. O'Doherty, of this city, relative to the establishment of a glucose manufactory here. At the time the letter was written, Mr. O'Doherty was in New York, with a view of purchasing machinery for his proposed manufactory,

The letter is as follows '-

lot of 300 key locks of a handsome pattern for the Fredericton post office

—Bank halibut have been in fair receipt since our last issue. We notice four arrivals, bringing 100,000 fb. which commanded good prices. Thirteen Georges arrivals have been reported with 302,000 fb. codfish and 52,000 fb. halibut. The number of herring arrivals have been reported with 302,000 fb. codfish and 52,000 fb. halibut. The number of herring arrivals have been reported with 302,000 fb. codfish and 52,000 fb. halibut. The number of herring arrivals with 112,000 fb. floorges code sh. 92,000 fb. lastibut, and about one mill in frozen herring. Last year, for the week ending Jan 20, there were one arrival from Newfoundland with frozen herring, four from New Brunawick with do, nine from the Banks with 210,000 fb. codfish and 63,000 fb. halibut.—Cope dan Advertuer.

—The Montreal Gazette says. The trade in Canadian phosphate during the past year has been fairly satisfactory, considering that this important branch of our exports is as yet only in its imbryo state. The shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the shipments of phosphate from Montreal to Fredrick for the manufactured for the manufacture for the same for the same for the same for

end is to come they cannot not. We have been awaiting it for ninety verts and of the first American tariff was adopted for sixty years since the highly profestive tariff of this, for tilly years since profestion. run mad was put in force in 1826, and for twenty years since the present exercitant tariff of 1801 This is not merely a dising nuous statement it is

positively dishonest. The impression is sought to be made that we have had an unbroken reign of protective tarille for ninety years. In-tend of that the longest consecutive period of protection, in all that time has been the nearly twenty years since April 1, 1861, when the Morrill tauff, approved Match 2, 1861, went into operation. The protective tarit of 1842 was in force berely hity-one months. The protective tarial of 1224 supplemented by the act of 1228, formed a satem which lasted only until March 3 1833, or only eight years and sixty-one days, when the act of July 14, 1932, went into operation, reducing the duties on a number of articles from 39 down to 25 per cent ad alorem, and this was followed by the free traders' tariff-the so-called "compromise act " of 1833, passed to appeare the South Carolina nullifiers - which went tective tariffe, divided into three terms, each separated into effect on Jan 1, 1831. Until 1824 we had no from the others by a considerable interval. No sooner teriff which can be considered protective, except as was manufacturing industry set upon its feet by the contrary notwithstanding. Thomas II. Shearmen to the protective system, and some project made, than we contrary notwithstanding. Thomas II. Benton, who tanif for revenue only "would come along to prostrate was a part of the history of those early days of the most of the ratalifebrane. Republ. is a far more treatworths witness. Refer-invested in them, discharge a multitude of work-ring to the plan of the tanif of 1824, he says, in his men into idleness and want, hand our home Thirty Years View, vol 1, page 32 .- Revenue the phiect, protection the incident, had been the rule in the entiter tariffs; now that rule was sought to be repreed, and to make protection the object of the law, and revenue the incident. Mr. Benton testifies in ac-contained with the facts, Mr. Shearman in accordance with his preconceived opinions, taking the facts, so to boak, by the nape of the neck and the seat of the breeches, and hustling them into their arbitrarily assigned places, or, in lawyers phrase, Mr Benton, like a judge, delivers an opinion just to all, while Mr. Shearman, like an advocate, makes an argument in support of his clients side of the case. The act of 1816 was very far from being a whighly protective tariff." It was a planters and farmers measure, southern in origin, and designed principally to benefit southern agriculture. Because the south grew cotton, the manufacture of cotton goods was protected, but woollens were not, wool not being a staple of that section. Much of the law consisted of a mixture of incongruities. Many fluished products were dutied less than the raw materials out of which they were fabricated. From itself was well protected, be, almost all manufactures of iron, the commodities for the production of which pig or tar iron could be used, were admitted at 20 per cent, ad eaforem, thus, of course, opening the was for the many slevices of undervaluation and of false invoices, to evade payment of full duty, then much practiced, but not so well comprehended as now by the administrators of the customs laws and by the public. In brief protection was given to the coarse commetties, which required it least, and refuses the for the production of which the coarse ones were to be used As a consequence, the protective features were mostly inoperative, for the home demand was largely cut off from the apparently protected articles by the easy access granted to the manufactures wrought out of those articles. There was little encouragement offered to produce the e articles under such executatances of practical repression. It is a mockery of the truth tween nations in all the world, or between any two as the barren reck is called. If there is a great deal to attle such a wild protective. Not by countries, and must be, therefore, in our case, an of ore and very little gang, the mine is worth a great deal to be well a wild provention of facts of history can the from wild terretaion of facts of big trade battle be won, if wen it ever is to be. Arguments that will gain the conviction of our people
must follow the straightforward path of verity. It is
the conviction of our people
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must follow the straightforward path of verity. It is
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must follow the straightforward path of verity. It is
principles of national economy, or else knowingly traity leds \$20,000 to the ion. It is perfectly correct
to the convergence of the traders have travelled by the convergence of the traders and the traders are the convergence of the traders are the converg in the contrary path that free traders have travelled up to the present time. But the enlightened day has cume when they can no longer hide in the jungles of error, nor issue forth from the ambuscades of sophis-The lattle of the future is to be waged upon the open plain, in eight of all men where Armagedion and his bands are to receive their doom. During the war of 1812, all the permanent duties were doubled, but the lack of symmetry in the tariff-the absence of inter-relation and inter-dependence in apportioning the duties-would have neutralised any intended protection by the doubling of entry charges. A very remarkable development of manu-facturing industry took place in the United States while the war lasted. This growth, however, was due to the discontinuance of commercial intercourse with Great Britain-our chief source of imports-in accordance with the universal principle of military campaigns, that trade is not allowable with allei enemies. It is plain that the tariff was not the parent cause of our industrial progress during the period of war, because, in the fiscal year ending Soptember 30 1814, the total imports amounted to only \$12,965,000. while, in the fiscal year ending September 30th, 1815 they bounded to \$113,041.274, and, in the fiscal year ending Septomict 30, 1816, \$147,103,000; yet, through out nearly the whole of those three years, the double duties were in full operation, and during the few months otherwise, at the end of the tom, the tariff of 1816- the highly protective tatiff," as Mr. bhearman styles it—was in force. When peace arrived, the double duties were not audicient to prevent a deluge of foreign goods from pouring into our market, and overwhelming the home industries which had grown up during the war. It is clearly evident, therefore that the double duties were not in themsolves protective in effect.

The first tariff act was approved July 4, 1789, a went into effect August 1, following. It was preceded by this now famous greamble; "Whereas it is neces-

SPIRIT OF THE COMMERCIAL AND MANUEL AND LINEAR PRESS.

INDUSTRIAL PRES code the progenty of agriculture, and that agriculture cannot the life diversitied agreestally or widels until thouses the growing which got considerable development of the repositivity manufacture charger in the end. Proceeds when the West of these duties were at a three, the highest and ; an With these and his own labor, he made his bond 15 per cent, all of these relating to conches, chariote, curriage a chaises, and solos or sulkies. All go de, other than tess imported from China or India. we re to be admitted at a rate of 123 per cent. Four-teen classes of articles were dutted only 10 per cent. Thirty-four other classes, among which were all kinds of paper, buts of heaver, for or wool, fron castings, shit and rolled iron, hather and most of its manufactures, anchors, blank books, buttons, ready made clothing and saddles, were dutied only 14 per cent. All other goods, wares, and merchandise were to passour custom houses at the paltry rate of five per cent,, except sixtien articles but on the free list, and such others as carried specific duties. Among these last was an elaborate system of duties on teas, varying from & to 4's cents per pound No man of common sense to-day would style such a tariff as protective, as Mr. bheatman dors. From August 1, 17-9, when the first tariff went into force, until the date of this publication, has been of years, 5 months, and 25 days. cif that long period 2 years, 2 months and 24 days have been covered not came took but little interest in the stories which consecutively, but in an intermittent way, with proceeding the from the West. The men who gave active tariffs divided into three terms, each separated the greatest credence to what they heard generally consecutively, but in an intermittent way, with promarket over to toreigners, wreck private and public credit, plunge the government into debt to raise means to defray the ordinary expenses in time of profound peace, and spread distress to every nook and corner of the land. Unly stupid ignorance or audact-on- unscrupulousness—which is it in Mr. Shearman's case?-would venture to teach the people, through the columns of the Christian Union, that the protective policy will never cheapen the prices of commodities, because we have had continued protection Arisona be developments, for mines had been known from 17e2 to the present time, without being able to stand up uncolended against the competition of foreign labor paid only subsistence wages. Does Mr. Shear-man expect to get to heaven by such lying as that? There is every reason to believe that, if this country had enjoyed, from 1879 until now, such tariff protec tion as is in vogue to day, it would be immaterial to the American people whether their government raised revenue through duties on imports or by direct taxes. By unbroken protection for about 75 years, we created the cotton crop in the United States, and brought it to such a degree of development that a duty on raw cotton would be useless for either revenue or protection. A similar course pursued toward our manufactures might have made them equally independent of the tanff. They can hardly be expected to grow and thrive on getting knocked flat by intermittent attacks of free trade principles. Great Britain very cautiously and gradually ventured upon her present system, (which is very far from free trade, because she has a tariff from which she raises an annual revenue of about \$100,000,000), only after centuries of prohibition alowiy relaxed into protection. With all the warnings of experience in our own part, and with the teachings to be found in the history of Ireland, Turkey, Portugal, Russia, and Holland, relative to the ruinous effects of even an approach toward free trade, we cannot understand why any honest and well informed mind should urge the United States to adopt the free-trade policy, pure and simple, when it does not exist beuntried experiment, without a star or beacon-light to deal of money. If the co ing to make the worst appear the better reason. I'rotection will make things cheaper in the end, as it has with regard to raw cotton and a number of manufactures, if only you will give protection a fair chance.

#### THE FARMER AND PROTECTION.

(Chicago Inter-Osean.)
When nearly the whole body of the people are engaged in agriculture, as in the South, a home market for any considerable share of the crops is a simple impossibility. The grower of cotton, or tobacco, or of rice, has neither need nor desire to purchase a like product, he is always and everywhere a seller, not a buyer, of the commodity. If his surplus cannot find sale in his own neighborhood, it must be sent to a distant one for that purpose; and if customers or consumers cannot be found nearer than Liverpool, his growths must cross the ocean in search of a market. Most of his pay is soon converted into cloth, clothing, hats, boots, above, utensils, implements, furniture, and the whole round of articles required to meet the wasts of household and plantation life. Many tone of raw material are necessary to pay for a single ton of finished products. A small quantity of manufactures represents a number of bales of cotton, or hegshoods of tobacco, or tierces of rice, packed in small compass. The tax of transportation on the outgoing freight is large and operous, because of the great bulk of the commodities; that on the incoming freight is mali and easily borne, because of the diminutive bulk. Those several taxes come out of the peckets of the respective producers; for he who is dependent upon a distant market for his products must either himself pay the cost of their transportation to their market, or else to some trader who will, the price market, or else to some tracer who will, the price of a georgical examination of the emrossing one at Rollo Bay Head, and we learn that at received being minus the sum required to remove the country. The second is that the expert may be deviable on the sum place. All the purchase to such market. In this trarection she conved, withingly or unwittingly, by the owners of outton-planter, the rice-grower, and the tobacco-raiser the mine. This, of course, can be prevented by a construct of the country. Success to the calculated and the country of the country.

the methods or getting the precious metal. The The list of du'es levied in 1730 was quite short, outfit of a placer miner consisted of a pick, shovel "pile" The "plant in a quarts mine included holding works, power, a lattery of stamps to crush the ore, pane in which to mix it with mercurs, settlers in which the aural gain was collected and taken out, reterts to drive the mercury off, and, if the ore contained sulpturets and chlorides, chemicals to reduce the gold to a metallic state. In other words, requisite for the working of mines; and the reign of the company and the capitalist began. The finding or result in gold and silver of the ore attached the capitalist began. of gold-bearing quartz was followed by that of silver. The great Comstock Lode was located in Nevada Men began to look upon mining as a more settled profession or occupation than they had before. It was no longer a case of digging to-day and working at anything that turned up to-morrow f stunes were still made, but it required tortunes to make them. The stock boards were organized, and in short, mining had become a recognized business on the Pacific Slope. Up to this time the people of the emigrated, and for the rest, they looked upon gold emigrated, and for the rest, they looked upon gold and aliver mining as being a kind of speculation, which contained far too many chances to make it worth while risking money. Suddenly, in 1874, the news of the Bonanza in California and the Consell-dated Virginia, burst upon the world and startled every capitalist that heard it. Here were mines, purchased for about half a million, selling for thirty-five millions and naving interest at the rate of five millions apiece and paying interest at the rate of twelve percent, in the shape of dividends; and that as the result of capital invested under intelligent superintendence. This was a proposition which eastern capitalists could comprehend, and the result of that comprehension was a movement of eastern capital westward. Then came the discoveries—the word "discoveries" should possibly for Utah and and worked in both territories prior to 18:4-of mining districts in Utah, Colorado, Arizona and Mexico. Pacific capital had found more than it could handle in the mines of California and Nevada, so that the new fields had to depend upon the East for their development, and capitalists in New York, Boston. Philadelphia, Chicago and St. Louis became the owners—somewhat to their astonishment—of mines that paid well. It was not to be supposed that a state of things which involved the purchase by capitalists of property about which they knew comparatively little, should not give rise to cases of fraud. Men with ledges which might pay five dollars per tou, came east, and by misrepresentation, assays which amounted to nothing as far as the value of the mine was concerned, and tricks which have been common to sharpers in all ages, managed to sell their worthless locations. We say "armys which amounted to nothing," for this reason: an assay of ore is, as most persons know, a chemical process by which the amount of gold and silver in that rices of ore is determined. It is, as far as it goes, absolutely accurate. Did a quartz mine consist of a great velp of ore, perfectly homogeneous throughout, an assay of any one plece would be, or course, practically an assay of all.
Unfortunately this is not the case. The ore in a quartz mine generally lies to small seams or bunches, surrounded or walled by white or barren quartz. The value of the mine depends, therefore, upon the proportion which exists between the ore and the "gang," in saying so, because a ton of that kind of ore would undoubtedly yield \$20,000. Unfortunately, and it is in this point that so many people make grave mistakes, the assayer counct tell you how much of that kind of ore there will be in a ton of rock when taken out of the mine. That is something he knows nothing about. An example will illustrate our meaning. In the silver mines of northern Arisona nething is more common than to find in the clay "casing" or seam between the ledge and the stratum next to it, small masses of pure silver in the form of wire, mixed up with from one-twentieth to one-tenth of the weight of clay. An assayer would find that there was in every ton of such stuff from eighteen to pine teen hundred pounds of pure silver, and his area; would be correct. The absurdity of buying a mine on the strength of such an assay is abundantly shown in the fact that not more than ten or twenty pounds of such ore would be found in the whole mine. Many of the "experts," too, sene out to examine these ledges were unable to give a report of any value, simply because they had no experience in the class of mines they went to see. In spite of all these fraude, the successful Ventures more than counterful anced the failures, and so the business grew until now it absorbs an enormous amount of mency. The risks attendent upon an investment in mines may be divided into two classes. First, the risk of the mine giving out either because it is a "pocket," or ledge at ends two or three hundred feet down; or, be cause some great fault has out off the lower part of it. These may both be guarded against to some entent, the former by an examination of other mines in the neighborhood as well—in some degree—by the eman-ination of the cres of the mine itself; and the latter by a geological examination of the surrounding

one ful selection of the man they send out and of the proposed purchasers. The examinate by an expert is not, as many suppose it to work of a t-w days. It may be, when print to classed under three beads. The first in the for timbering the mine is to come from our s price will be, and an examination of the street the mine and the mill, as well as of the manner in which the ore lies in the gre should also include what is called a " million. of the mine. To get this, from forty to sixual ore—the or being taken from all parts of the control of the cont are dug out and carried by mules or warren every ten or twenty minutes a tenspoint from in front of each stamp. These special slime are then assayed, and the average result an average assay of the mine As no other to: worked, is, of course, brought away. A sea expert will, in making a report, after a branch, of the points we have mentioned, offer maged to to the future working of the mine, which is a cases are of great value. When such a reject of ceived by the gentlemen who propose to partie o mine, they certainly have an amount of knowing about the property they did not have before and which they can found a decision with a real inhops of not being mistaken.

TORO

#### JUDICIOUS ADVERTISING

(Chicago Industrial World.) That judicious advertising pays, is one of the questions which, having passed the domain delation and experiment, has been settled conclusion in the affirmative But all money expended water tising does not prove a successful investment with reason is plain. The party invosting may not us an article worth advertising, or he may have store for his medium one of the ten thousand worten journals, which have neither circulation nor state, with the public, or perchance, the manner eladiering has been at fault. This latter is an impressional deration. Every merchant of experience has that building up a trade does not alone order sending out travelling men. The goods offering alle should be desirable in kind, quality a drive Not every salesman is capable of building up a trace because he has not the happy faculty of preents his claims in that favorable manner which at an the customer and insures a sale. The wording tes of an advertisement should be such as to make favorable impression on the mind of the rester I newspaper is expected only to bring the custome the door of the merchant-after that the responsible of making a sale rests with the dealet. If he dealer keep the goods demanded by the customer man willing to meet the market, or is not a qualitriam man and cannot hold the customer, the fault co with him. One very foolish idea advertisers see times have is the expectation that every one in 2-x to call upon them by the newspaper will mention 2 fact. The truth is that not one out of ten ever it. to give credit to the journal through whose us they are induced to call. The experience of an prominent journal in the country verifies thatset tion. Frequently the business man whose patters is solicited says. "Advertising is very good to? does not pay in my business. This remark wurs made by a wholesale grocer to a representative of a of our Chicago newspapers, when he was prompt met with the reply, "I cannot see why you that when one of the largest wholesale gracery to in the city, alandoning all other methods of so all trade, except by advortising, has met with a work ful increase of business since so doing." If expense is any kind of a guide it certainly teaches the kinds of legitimate business can be successful?" moted by the right system of advertising in the sp kind of sheets. The man who thinks his bu-ses exception to this rule would do well to expenses little farther and more thoroughly, and he was cover that his business can be enlarged and bear by advertising. These who relegate the column di first-class newspaper to patent medicine adverse ments and specialties show a lack of comprehents the true method of advertising and the best dated These men should be sent to a school where some ing is taught as a science.

The Charlottetown, P.E.I., Examiner and -1 publish a list of the new factories to be built en Egmont Bay slicre, as follows:—One in il a Arsenault at McKie's wharf, and two at Rocks in the one by Trudello and Gallant, and one by bullet Burque; another at the Chapel shore, per Galant O'Loary of N B, and another by H. Poirier latered whart and Cape Egmont, one at Cape Egmont, was in operation last summer, by P Lellian a couple of miles south by Mr Harshman el Ni two or three more on the shore of Fifteen Post lobster canning business promises to be sen at in Kings county next summer, many new tot being in course of crection. At St. Peters left McLaine, Eaq, is erecting a factory. At Black! Messra. Brownell & Cheverie one; at Roll C. Messra. McLean & Morrow one, at McIndian Macdonald, Macdonald & Co. one; at Campbells Mesers C C. Cariton & Sone are enlarging the North Lake, the Gult Shore Packing Company erecting one, and also another at Bothwell as aouth side of Kast Point, while at the extrem-Point, Messra, Cairns & McInnis have one unic tract. In addition to these, Mr. Healy has one l'oint, one at Bouria, one at Fortune Head at learn he intende to creet another at Chepaton. Mesers. Calras & Mclania also have one, and an al at Little Harbor. Mesers. C. C. Carlton & Sons by one at Rollo Bay Head, and we learn that Mr Row with also have one near the same place. All the with the averables of the care of the ca

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#### WEEKLY REVIEW.

Токохто, Реблику ЭВ, 1841

Telegraph was firmer; sold at 911; closed with sellers I higher and bids unchanged at 931. Montreal Telegraph was offered 2 lower with no bids. Loan and Savings stocks were steady. Landed Credit was offered as before without bids. Building and Loan offered as before without bids. Building and Loan offered as before without bids. Building and Loan was offered 1 lower with bids 1 higher. Bids for Farmers advanced 1 or to 1281, with sellers at 130. Bids for London and Canadian rose 1 with none offered. National Investment was offered at 115 with Mids unchanged at 107. Bids for Manitoba Loan advanced 3 or to 115, with sellers as before at 120. London Loan was offered 13 lower with no bids. Brant Loan was not offered. Dominion Savings was wanted at 1173 with no sellers

In the produce market there is little change to In the produce market there is little change to note. Flour remains purely nominal, with superior extra offered at \$4.80, and extra at \$4.70, with no inquiry. Wheat is inactive, but the downward tendency is checked; No. 2 fall was held to-day at \$1.05; No. 1 spring would probably have brought \$1.15, and No. 2 spring \$1.13, but it is not very certain that holders would have sold at these prices. Oats were in good demand with sales of cars at 34 @35 c on tracks these figures represent the two extremes: track; these figures represent the two extremes; buyers generally bid 35c. Barley was steady, and a good deal—about 20,000 bushels—changed hands on good deal—about 20,000 bushels—changed hands on p t.; buyers could have been found at about 80 to 830 for extra No. 3; at 87 to 880 for No. 2, and at 92 to 930 for choice No. 2 Peas were quiet but steady; cars of No. 2 would have brought 68 to 67c, and cars of No. 1 from 68 to 60c. Potatoes have been wanted at 450. Eggs continued very scarce and in active demand at 250. Hogs scarce and unchanged, with buyers at 47.50. buyers at \$7.50.

#### BRITISH GRAIN TRADE

London, Feb. 7.—The Mark Lane Express, in its review of the grain trade for the past week, says:—Despite the paucity of supplies the trade in bread-Despite the paucity of supplies the trade in bread-stuffs has been weakening during the whole week. The quoted rates were barely obtainable on Monday, white on Friday a very limited business was done at a reduction of is. The provincial markets experienced the same fall earlier in the week. It is noticeable, as an evidence of the conviction of millers that prices will fall, that the decline began in the provinces instead of in London. Flour has been in freer supply The smallness of the deliveries in the present scaon proves that the out-turn of marketable grain in 1880 has been over-estimated. Foreign flour received very little attention. Hed wheats declined is since Monday; finer descriptions of white retained their value, but the trade was very slow. The off-coast market was well supplied. Sal a were few and in favor of the personal was cheaper in all positions, the large prospective supplies preventing an advance. The week's aupplies where chiefly from America, Australia and India Barley has been chiefly from America, Australia and India Barley has been slow, with a dragging trade. Good samples, which are scarce, are unchanged. Foreign barley dull and weaker for very best runs. Oats were similar in tone, and in rather better demand on Friday. Maise declined, closing weaker far all descriptions and positions. Sales of English wheat for the past week were 30,559 quarters, at 42s., against 37,316 year. Imports into the United Kingdom for the week ending Jan. 29th, 459,077 cwt. wheat, 214,630 cwt. flour. has been over-estimated. Foreign flour received very little attention. Red wheats declined is since Mon-

#### FOREIGN DUTIES ON TOBACCO

In Anatra, Vrance, Italy and Spain the telacco commerce is monopolised by (lovernment, under direction of a Regio. In Germany the duty on leaf tobacco and of a Regio. In Germany the duty on leaf tolsace and stems is 85 marks per 100 kilogrammes, equal to 10.40 cents per pound, on strips and scraps, 180 marks per 100 kilogrammes, equal to 22.05 cents per pound; on manufactured tolsace and cigars, 270 marks per 100 kilogrammes, equal to 33.08 cents per pound. On tolsace produced in Germany, the tax taking effect after April 1, 1880: From April 1, 1880, to March 31, 1881, 20 marks per 100 kilogrammes, equal to 3.67 cents per pound; from April 1, 1881, to March 31, 1882, 30 marks per 100 kilogrammes, equal to 3.67 cents per pound; from April 1, 1882, and thereafter, 45 marks per 100 kilogrammes, equal to 3.67 cents per pound; from April 1, 1882, and thereafter, 45 marks per 100 kilogrammes, equal to 5.50 cents per pound in Belgium the impost is reckened after deducting 15 per cent. for tare. The duty is 26 francs (\$3.86 gold) per 100 kilogrammes (100 American pounds equal to 451 kilos.) In Holland the duty is 28 cents, gold, per 100 kilogrammes (100 American pounds equal to 451 kilos.) In Holland the duty is 28 cents, gold, per 100 kilogrammes (100 American pounds equal to 451 kilos.) In Holland the duty is 28 cents, gold, per 100 kilogrammes (100 American pounds equal to 451 kilos.) In Holland the duty is 28 cents, gold, per 100 kilogrammes (100 American pounds equal to 451 kilos.) In Holland the duty is 28 cents, gold, per 100 kilogrammes (100 American pounds equal to 451 kilos.) In Holland the duty is 28 cents, gold, per 100 kilogrammes (100 American pounds equal to 451 kilos.) In Holland the duty is 28 cents, gold, per 100 kilogrammes (100 American pounds equal to 451 kilos.) In Holland the duty is 28 cents, gold, per 100 kilogrammes (100 American pounds equal to 451 kilos.) In Holland the duty is 28 cents, gold, per 100 kilogrammes (100 American pounds equal to 451 kilos.) In Holland the duty is 28 cents, gold, per 100 kilogrammes (100 American pounds equal to 451 kilos.) In Holland the duty is 28 cents (100 American pounds equal to 100 American pounds (100 Amer her 100 kilos (180 American pounds being equal to 127 kilos). In Holland the duty is 28 cents, gold, per 100 kilos (280 American pounds being equal to 127 kilos). In Russia the duty on leaf to secco is 4 roubles 10 kopeks por pud; on smoking to bacco 26 roubles 40 kopeks kopeks per pud; and on cigars 2 roubles 20 kopeks per pud. The pud is equal to about 36 American pounds. In Turkey theduty is 56 cents, gold, per 11 American ounces. In England the duties on unmanufactured are: stemmed or stripped and unstemmed, containing 10 pounds or more of moleture in every 100 pounds weight thereof, 3s od per pound, containing less than 10 pounds of moisture, 3s 10d per pound. On manufactured tobacco. Cavendish and Negrohead, 4a lud per pound, all other sorts, including eigarrettes. In addition to the above duties there is a charge of I per cent wavehouse charges on all descriptions. The rates of duty now imposed in Canada on the various manufactures of tolacco are as follows Cigare and eigerrettes 60 cents per jound and 50 per cent ad ratores. Manufactured tolacco, 25 cents per pound and 124 per cent. ed retorem Snuff, 25 cents per pound and 124 per cent. ed retorem In lieu of all excise duties—except heerse fees—now imposed on tolacco known as "common Canadian twist," other-raw tobacco, the growth of Canada, and upon raw leaf, the growth of Canada, there shall be imposed, levied and collected on every pound, or less quantity than a pound, an excise duty of 4 cents. In Newfoundland the duty on manufactured and smoking tobacco is 15 cents per pound; cigara, \$2.64 per mille and 5 per cent ad colores, leaf, unstripped and unstemmed, 13 cents per pound, leaf, stripped and stemmed, 16 cents per pound. The above prices in American money.

#### THE UNITED STATES MALT DUTY.

Washington, Feb. 8 .- The Senate Finance Com-The stock market has been quiet and I nices of bank stocks generally easier. Montreal was offered to-day of 15 cents per bushel. In the Senate to-day Mr 1 lower with bids unchanged. Toronto was offered at 115 with no bids. Outsine was offered 1 with bids 1 library in the constitution. It prohibits either lower Merchants was offered 1 lower without bids. Dominion was itimer; three shares sold at 150, which bid was repeated, being a rise of 1, with no sellers. Bids for Standard declined 1 limperial and Commerce were offered 1 lower with bids as before. Misself and closed with sellers at 153 without bids. Bids for Confederation declined 2. Dominion Telegraph was firmer; sold at 911; closed with sellers 1 higher and bids unchanged at 931. Montreal Senate, such authority slows not extend to treatles mittee has indefinitely postponed further consideration Senate, such authority does not extend to treatles which after the revenue or require an appropriation of money to execute them. In which case the consent of the law-making power of the Government le required, which includes the House as one of its branches

#### SUMAC AS A MOTH DESTROYER

Sumac has lately been recommended in Europe for destroying moths in clothing and articles made from thine. Until this application of it, it was only known as a dycing and tanning stuff, and many in Kurope, it is said, have been greatly astonished to find this sub-stance possessed of a virtue so unexpected and so valuable as is claimed for it. It has not yet been discovered in Europe, however, notwithstanding all at-tempts made to unravel the weret, what there is in summer that gives it its efficacy as a moth extermina-tor. We were not aware that the summer of commerce would destroy moths or prevent them from laying their eggs, and were hardly prepared to find its deadly qualities set forth in so strong a manner as they are in the Berlin Hutmacher Zedung, which says:—
"Bumae is the name given to the youngdried stems and leaves of a shrub indigenous to Southern Europe

(the Raus cortaria of Linneus), which stems and leaves, in a pulverized form, are the article of commerce that goes under the appellation. The common dyestuff mentioned contains gallic acid and tannia. like gallnut. As experience seems to have shown that moths can be successfully combatted and kept away by substances having strong odors, as musk, patchouly, camphor, or casenne pepper, which has an inflammatory effect on the insect's skin, or by arsenic, in the case of stuffed animal skins, it appears extraor-dinary that sumac, which is almost odorless, should produce the effects attainable by the violent agents mentioned, and that only with careful application.
Attention should here be called to a danger which exists of confounding two different things with one another. There is a variety of the so-called poleonous sumso (Rhue texidendren or Rhue radicans of the control of the so-called poleonous street of the so-cal Linneus) which is a shrub indigenous to Canada, Virginia and the Carolinas, the steme, leaves, flowers and fruit of which shrub are highly poisonous. It is related that with the milky juice from the branches of this shrub the Indians formerly used to poison their arrows; and that of the Hessians, who fought in North America in the war of independence, several died of apoplexy from eleving in the neighborhood of this very same poleonous sumes shrub. The exhaladied of apoplexy from sleeping in the heighborhood of this very same poisonous sumac shrub. The exhala-lions of the plant are dangerous, e-pecially after san-down, causing swellings and blisters on the skin as well as nausea. The leaves of the peisonous sumac are cut in June and July with sciesors, and allowed to fail into a wouden sieve in which they are sun-dried, to cortex that after drying thay may be channed small

temporary. Nearly every one in America knows the effects of handling this plant, but few, when wandering in the woods, know how to distinguish it. It, as well as the swamp dogwood, another poissesous shrub, are among the one hundred and twenty species of summer known to botanists. It will never come

to Adelina Patti of a diadem worth 80,000£ -The revenues of the Sultan of Turkey are

about \$70,000,000, of which \$65,000,000 goes to the The room in which Lincoln died is the playroom of the children of Mr. Schade, editor of the Washing-

ton Sentinel.

It is expected that the iron ore shipments from Madoc during the coming seeson will aggregate 100 cvrs, or 1 200 tons, per day. It will nearly all go by water from Belleville. \_The Cape Colonists expect a speedy end to the Basuto rebellion, some 4,000 troops having been liberated for service in liasutoland by the suppression of

the rebellion in the Transkel. -The Russian Budget for 1881 shows a deficit of

50,000,000 roubles, which it is proposed to fover by means of the railway fund, now indebted to the State to the amount of 138 000,000 roubles ...The United States Government has agreed to

the proposal made by France for an international conference at Paris on the bl-metallic standard. The other powers are to be invited to send representations.

—The total value of goods entered at the port of St. John for the mouth of January was, for consumption, \$199.271; for warehouse, \$17.084; free goods, \$28,705; total, \$275,080. The value of the exports for January was \$79,173.

-The National Cotton Exchange (of New Orleans) statement shows the amount of this year's erop received at the ports and points of the overland crossing during the five months, is 4.372,000 bales, an increase, compared with last year, of 195,000.

#### SCIENTIFIC AND PRACTICAL.

WIT A BELT BUNS TO THE BIOMEST PART OF A FULLEY

Mr J H conject to bin time of Bolting campa -of the come is more rap fly drawn than the outer edge, in consequence of the the advancing part of the belt is through into the direction of the role which obliquits of advance toward the cone must lead the belt on its highest part. It has been unreal in Clienton to this workname that it does in Ojection to this explanation, that it does not a count for the fact that a count felt will be by no rienting edge, in haren partition and one, and ness and the mium, lately read before the themsal that it does not explain why a bilt stope climbing so won as its centre too her the higher part of the cour It is argued that thes lead at end continue until the entire belt—the entire width—has reached the higher part and that then a reilex action abould take place, so the last so that the belt should be in perpetual color, but is gray and pertially opique. It follows as the other colve of the belt would then he sublected oscillation from alde to side. These who urge these objections to the foregoing explanation, hold that centrifogal force is a sufficient and simple explanation of the creeping of a belt. In teply to the of jections just presented, Mr Cooper answers that it must be obvious that that part of a l- it nearer the highest part of a rounded pulley must be more rapidly drawn, because the circumterence of the pulley is greater, and this effects a round belt in the same way, because such a belt is not cound in action but oval, with a flat face against the pulley, and this that face, however narrow, is subject to the same unequal drawing force of the This explanation does not necessitate that such a belt should be in "perpetual oscillation" Mr. Cooper urges, since the advancing edge pushes back after it passes the summit, with a gradually increasing force, until half the width is over, when the belt is in equilibrium, and quietly remains there. Centrifugal force doubtless has some influence on belts running at high revolutions, but it may sately be omitted as a factor in the explanation of the creeping of a belt, because it is a fact that a belt will surely go to the high part of a pulley, even if its velocity is invisible, or no greater than clock wheels, and it must. therefore, be assumed by the advocates of the centri-fugal force theory, that if the centritugal force at such speeds would be equal to the task of pushing heavy belts up the incline of the pulleys, it must be equivalent to the force required for pushing the same belt over the straight face of a pulley. We think, from over the straight face of e pulley. We think, from a permai of the above, our readers will agree with us that Mr. Cooper's explanation of the creeping of a belt is the correct one - Manufacturer and Builder.

THE EXPANSION OF STEAM. Prof. R. H. Thursten writes to the Scientific American as follows in answer to the question "What is, really, the proper point of cut-off in steam engines to give maximum economy in dollars and cents?" Some cople say one thing and some another. In your people say one thing and some another. In your Elistory of the Steam E. wine, page 475, you say about one-half the square root of the steam pressure is about right, in general, and a writer in the Journal of the Frenklin Institute, for June, who ought to understand the matter, mys that the steam pressure divided by the tack pressure gives the number of times to expand to secure maximum efficiency. Now, your rule would give, for a Coillas engine with 90 pounds of ateam, a cut-off at one-fifth, while the last would make it one-seventh. Then again, for an old fashioned engine with condenser, cutting-off steam at 25 pounds, your rule makes it about one-third, and the other says one-fifteenth or even one-twentieth, which I know by experience, cannot be right." The professor answers as follows. The point of cut-off giving maximum economy is never precisely the same in any two engines. It will vary with every change of type, with every change of pressure of , with every difference in piston speed; and even in two engines built from the same drawings, and made from the same patterns, the degrees of expansion being the same, the two machines will demand different quantities of steam. Could all the conditions affecting the expenditure of heat in the preduction of power be made absolutely invariable, the point of cut-off for maximum efficiency could be determined for those conditions—not by calculation, but by experiment; and it would remain the same just as long as those conditions could be maintained absolutely the same. But this never occurs in praction. Mean enters the cylinder semetimes barely dry, semutimes superheated, sometimes damp with a watery rapor, and often mingled with water to the extent of 10 or 20 per cent.; it even sometimes carries with it claimed, a machine by which the power of the tides more than its own weight of water. It semetimes can be utilised. Numerous plans have been proposed comes in contact with hot and nearly dry metallic for the accomplishment of this most desirable end, surfaces, which aid in keeping it in a state of but only under exceptional conditions have they been they can be liquefied by heat only when the pressure, while maximum efficiency, but it oftener, in fact usually practical or ecosusical. If the new device can harmonic is above a certain limit, a critical pressure, while where the assignment of a part of the same massis an interior filled with damp, chilling vapors ness the title in an open channel, so as to convert any below that limit they pass (under heat) directly into and surrounded by walls cool enough to condense a considerable portion of the vast power into working considerable part of the steam supplied up to the force, the inventor will rank among the great benepoint of cut off. During expansion the steam never factors of humanity. Emerson says somewhere :
follows prec'sely the law of expanding permanent which the pressure diminishes precisely ing mechanically the free tides, as they sweep along se-with which the pressure diminishes precisely in the proportion in which volutie increases—but, by condensation at first and by re-evaporation later in the stroke, the expansion line falls below at first and then rises above the curve expressing Mariotte's and Boyle's law, although frequently approaching that curve pretty closely. If the engine speed increases the steam is usually less affected by causes producing loss, if the speed decreases a loss of economy generally ensues. Large engines are less subject to such losses than small ones, and every reduction in the amount of engine triction permits a closer approximation to theoretical conditions. It is easy to determine the proper point of cut-off for any defined set of conditions provided that they are such as can be mathematically expressed; and the larger the engine. the hotter the steam used, the Ligher the piston append the less the friction, and the more perfect the system of lagging and steam jacketing, the more nearly will the actual correspond with the estimated value, but the theoretical state of expansion is rarely very nearly attained in our very best practice, and experience shows that we must usually content ourselves with a vastly amalter degree of economy by expansion than would be mathematically predicted Instead of cutting off at one-twentieth when using steam at 45 pounds pressure in a single cylinder condensing engine, we find that a cut-off of at most une-fourth gives, in practice with ordinarily good engines of moderate size, the best results. In handling non-condensing engines of 200 or 200 horsepower, with steam at 50 to 90 pounds, and a speed of piston of about 500 feet per minute, and using the standard forms of "drop cut-off" familiar to American

or any notice to the engineer. " No device stations there has been a sensy increase of continue yet invented has ever given a rough approximation to the employ yield ated on purely theoretical in 1877 when a very sudden and extensive upward grounds. We are atadually learning more and more about the heavier of steam in the engine, and are patents granted reached 500 only, in 1860 the applies to our convenient parents as illustrated by the best cations were of the parents and in 1870 they had increased to builders been not the sense of an above for all thinks. builders heating very clear to what is, all things out of carbon unalphide is agitated with semi-finid matters must be really method by experience

#### THE COLOR BELATIONS OF METALS

notably those of copper, nickel cobait, fron, mankas and brown shades on wool and sile. butlety, Mr T Rayley records some remarkable relations between solutions of these metals. It appears that iron, cotalt and copper form a nectral color group, for if solutions of their suipoates are mixed together in the proportion of 20 parts copper, 7 of from and 2 of column, the resulting liquid is tree from from this that a mixture of any two of these elements is complementary to the third if the above portions are maintained. Thus, a solution of cobalt (pink) is complementary to a mix use of iron and copper (blutch green), a solution of iron (yellow) to a mixture of copper and cotalt (violet), and a solution of copper (blue) to a mixture of iron and cobalt (red) But, as Mr. Bayley shows, a solution of copper is exactly complementary to the red reflection from copper, and a polished plate of this metal, viewed through a solution of copper salt of a certain thickness, is sil-rer white As a further consequence, it follows that a mixture of fron (7 parts) is identical in color with a plate of copper. The resemblance is so striking that a silver or platinum vessel covered to the proper depth with such a colution is indistinguishable from copper. There is a curious fact regarding nickel also worthy of attention. This metal forms solutions which can be exactly simulated by a mixture of iron and copper solutions, but this mixture contains more iron than that which is the complementary to cobalt. Nickel solutions are almost complementary to cobalt solutions but they transmit an excess of yellow light. Now, the atomic weight of nickel is very nearly the mean of the atomic weight of iron and copper, but t is a little lower -that is, near to from thus a perfect analogy between the atomic weights and the color properties in this case. This analogy is even more general, for Mr Bayley states that in the onse of iron, cobalt and copper, the mean wave length of the light absorbed is proportional to the atomic weight. The specific chromatic power of the metals varies, being least for copper. The specific chromatic power increases with the affinity of the metal for oxygen. Chromium forms three kinds of salts-pink salts, identical in color with the cobalt salts; blue salts, identical in color with copper salts; and green salts, complementary to the red salts. Mangabese, in like manner, forms more than one kind of salt. The red salts of manganese are identical in color with the copalt salts and with the red chromium salts. The salts of chromium and manganess, according to the author, are with difficulty attainable in a state of chromatic purity. He thinks these properties of the metals toad up to some very interesting considerations,-American Manufacturer.

#### THE ELECTRIC LIGHT.

A New York paper says :- The electric light is rapidly becoming popular in this city. The firm of Flak & Hatch, which has been paying \$250 per month for gas, is now obtaining far more satisfaction from the Maxim light for about the same amount of money. The Brush Company have just completed a circuit of three miles, which they claim to be the largest circuit yet put into operation by any company. Lamps have been put up along Broadway from Twenty-sixth to Thirty-fourth streets, and they have now thirty-one lights on their sall-night" circuit, twenty-three street lamps and eight private ones." It is stated that the Grand Trunk Reliway Company are thinking of in-troining the electric light at Point St. Charles, and that some of the cotton companies of the province and other large corporations are negotiating for its trial in their respective establishments. In New York the electric light is worked within circuits of a mile or two in different sections of the city, wherever there is the greatest demand for it.

#### DISCOVERIES AND INVENTIONS.

A Philadelphia engineer has invented, it is our shores, would come next to that, since it would enable us, through converters and carriers of elec-tricity, to bitch our waggoes to the sun and moon.

The Prail company propose to warm towns by means of superheated water. In New York recently this company gave a dinner to the Suclety of Civil Engineers, for which all the wands were cooked by means of superheated water. The company proposes to supply houses with water heated to a temperature of 376 deg. Fahr. It is asserted that water of this temperature can be conveyed a mile in boxed-in pipes without losing more than two degrees of temperature, and as no cooking-range will be at a greater distance than one mile from the generator, it is claimed that sufficient heat for all the purposes of the cook, and for warming houses, can be furnished without the necessity of fires. The water is sent through the system at such a rate that the complete circuit is made in fifteen minutes.

Prof Hebler, or Berne, has been experimenting with a new rifle of his invention. It is like a Mauser ride, but its calibre is only 7 mm. The ball of bard load, weighing 12 grammes, is very clongated in form, the charge weight 5 gr. It is guided in the grooves by a means of a washer placed at the point, which also cleans and greases the bore. Prof. Hebler hopes in some cases to obtain an initial velocity of 600 metres. In the experiments, made at Zurich, estimated results were had at 1,700 metres range; spite of a strong wind across the line of are, the deflection of the balls was very slight.

mee times. To therefore determination of remaind that is in 1878 they amounted to 5,343. With a few slight flue- I salicy lie acid and glycerine are somewhat increased. | 66,519,340 lbs. from the West Indies.

of any writer to the engineer . . . . No device triations there has been a steady increase of husiness

soilon amakem, and if the paste-like more is mixed with water, there is profited a hyudisth-red liquid, whilst merculy and microury aulphide are deposited. The solution contains a seelium salt of a yet unknown a Id, somewhat soluble in hot water, and more readily in about It dyes yellow, crange,

#### DUST AND FOO

It was a The paper which Mr. J ht. Aitken recently tend before the linyal Society of Edinburgh is a remarkable contribution to the subject of the origin of figs, mists and clouds. According to Mr Aithen, who has made a great many experiments, with moist air at various temperatures to determine the conditions which produce condensation of water vapor, the latter always condenses to the atmosphere on some solid nucleus. He further concludes that dust par-ticles in the air form the nuclei on which the vapor condenses, that if there were no dust, there would be no fogs, no mists, no clouds, and probably no rain, that the supersaturated air converts every obfect on the surface of the earth Into a condenser, on which it would deposit as dew, and, finally, that our breath, when it becomes visible on a frosty morning, and every post of steam as it escapes into the air from an engine, show the impute and dusty state of the atmosphere. These results have been verified by Mr. Aitken at temperatures as low as fourteen degrees Fahr, at which, however, there was little cloudiness produced, owing to the small amount of vapor in air The sources of this dust are many and various, it may be finely ground stone from the surface of the earth, or the ash of exploded meteorites, or living germs in this lecture Mr Aitken showed ex-perimentally that by simply heating any substance, such as a piece of glass, iron or wood, a fume of solid particles was given off which, when carried along with pure air into a receiver, gave its rise to a dense fog mixed with atcam he delicate is this test that the hundredth part of a grain of iron wire, for instance, will, when heated, produce a distinct heziness in the receiver. By far the most active source of these fog-producing particles is, however, the amoke and sulphur given off by our coal fires. Mr. Altken thinks that, as even gas grates will not prevent the emission of these particles, it is hopeless to expect that London, or other large towns, can ever be entire-ly free from fogs. In his opinion, however, our fogs may be rendered wniter, purer, and therefore less injurious to health, by the use of gas grates such as that recommended by Dr. Slomens, insumuch as the more perfect combustion ensured by their operation would prevent she discharge of soot-flakes. According to Mr. Altken, moreover, the smoke nulsance is, atter all, not such an unalloyed evil as it at first sight appears; for smoke and sulphur, by their deedorising and antiseptic properties, operate beneficially in killing the deadly germs and disinfecting the foul smells which cling about the staguent air of fogs. We should be careful, therefore, lest by suppressing smoke we substitute a greater evil for a lesser one."

Dr. Biemens' electric lift, which has been exhibited at the Mannheim Industrial Exhibition, is a useful invention. The cage is carried by wire ropes, having counter weights, so that the cage when loaded, is practically in equilibrium. The current-generator at the base is electrically connected to the dynamomechine in the case, and the latter actuates two toothed wheels taking into a metal rack running up the centre of the passage-way of the lift.

The Gordon lamp is giving satisfactory results. A light is obtained by it equal to about forty candles from one coll of a new generator designed by Mr. Gordon The machine now being experimented with has nearly 100 coils, and will maintain that number of lamps at an expenditure of two horse-power, exclusive of what is required for the exciter. The 1,200 lamps could therefore by kept alight on a machine fifty feet long. Every lamp has its own administrator; he was not compelled to describe the response of the limit that the responsibility of a distinct that the limit that The patents will, the Electrician believes, be secured in a few days.

the gaseous state, may be illustrated, according to Herr Hass, by the following lecture-experiment :-The critical proceure for mercury chloride being about 420 mm., put a solid piece of this sait into a thickwalled glass tube, closed at one end. Connect the open end with an air pump. So long as the rarefaction (as shown by a manometer) is under about 400 mm, it proves to be impossible, by any amount of heating with a gas flame, to melt the piece in the The mercury chloride sublimes directly into tube. The mercury chloride sublimes directly into the colder part of the tube, while, like a Leidenfrost drop, it oscillates, (gradually becoming smaller) on a cushion of its own vapor. If air be admitted, how-ver, till the pressure is over about 450 mm, fusion begins at once. The phenomena can be shown by projection to a large audience

lierr Wickersbeimer, whose patent for the preservation of organic substances, it will be remembered was lately lought by the Prussian Government, has now patented the following process for preserving meat for eating purposes. A solution (heated to 50 degrees C) of 36 grammes potash, 15 gr common sait, and 60 gr. lum, in three litres of water, is mixed with a second solution of 9 gr. salicylic acid in 45 gr. methylic alcohol, in which 280 gr glycerine is added. With this liquid the animal to be preserved is injected In the case of small animals, 100 gr of the liquid for every 1 kilogr, body weight, is recommended; in larger, the proportion may be reduced to 40 gr Fishes, birds, and such small animals are not pre-viously killed, but the injection made direct into the heat with a syringe having a sharp canula. Large animals are injected immediately after slaughtering, the liquid being introduced by one of the large cerflection of the balls was very slight.

The applications for letters patent for inventions recorded in the Lendon Patent Office during 1880 recorded in the large Control of the balls was very slight. were more numerous than in a previous year, having good and inodorous. If the preservation is to be for engineers, we can barely gain by expanding mere than were more numerous than in a previous year, having good and inodorous. If the preservation is to be for engineers, we can barely gain by expanding mere than were more numerous than in a previous year, having good and inodorous. If the preservation is to be for expension of methylic alcohol, a longer time, the proportions of methylic alcohol,

#### INSURANCE MATTERS.

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the short lately bendeld dief greger, to insurance companies (especially the lite) as to their rights and liabilities, when ti sen assigned for the benefit of a criber his ы

be a matter of some doubt and people on at wa life has been as ored with them does in a star solvenes and it appears that he has, before to come, assigned the policy to seeme additional perhaps larger than the amount respect to a case in the company funtified in withholding up nul a groper personal representation of the has been appointed or in the contany side in his to the assume of the policy? It has such it circumstances payment is withheld is the contained to pay interest on the emount of the payment. has been urged that when the reliev backs to receive by the assured the majorite has the right to of 1.34 ment and give a valid discharge to the company doubt in such a case the company could safe, and would be protected in the payment by the of Chancery,—t tax a matter of strict law it is one on the other side that the company are could the quite a discharge from the personal representative the deceased,-inasmuch as the cause of action and a right to receive the amount do not arise till the day of the assignor (the assured) and the vesting if 2 right of action in his personal representative and law be anticipated by a previous assignment; attanger. In Crossies to Glasgow Life Assen. Company L. R. 4, Ch. D 421, it appeared that the craved had promised to assign or deposit his pin secure a debt due to the plaintiff with the ver having the necessary documents prepared Page writings were executed, although the policy was talued by the plaintiff to secure a debt which ex me the sum assured. No personal representative of the deceased had been appointed. The Master of the B. held that the company was justified in refusing to sewithout geiting a proper receipt, and that ther we not bound to accept an indemnity on paying the plan tiff There was not even an equitable assignment the policy, and the company had the right to Latproved that there was a debt due by the decempt the plaintiff equal to the amount of the poler. The way in which the Judgo disposed of the case, he way was rather singular. He found on the facts that u-plaintiff was entitled to the money, and for this reser dispensed with the presence of the personal reprise ative, but he ordered the company to pay interest of the policy-money, not following the views expression Wolfe re Findley, 6 Ha, and relving on the Status 404 Wm. IV c 42, s. 28, as making a difference Th provision is the same as our U S ,U C c 43, s. 1 (to R S c 50, s 268, p 667.) Respecting this statuted construction placed upon it by Mowat, V. C. in 37 we Provincial Insurance Company, 19 Gr 44 is fire while it has been customary with the Courts to go interest on money recovered against insurance expanies, yet it is a matter of discretion only with the Court as with the jury, and not a strict legal new And we would have thought that when there was hand to receive or grant a legal discharge, as in t Crossley case, it was not a case for interest Very much the same question was again brent

before the same Judge in Webster co. The Bate Empire Mutual Life Assurance Company. The fire were that the deceased had deposited the policy will the plaintiff, to secure a sum less than the amounts. aured. No written assignment was executed and it letters of administration had been taken out-ties sured having died intestate and insolvent. The Keter of the Rolls followed his previous decision, being that the defendant could not safely have pad to money to the plaintiff in the absence of a personipresentative without the protection and indemnity an order of the Court; but he held that the compart must pay interest from the date of the proofs of the death. Upon appeal this part of the decree was versed by the unanimous judgments of Just Cotton and Thesiger, L. JJ, 28 W. R. 818 Therica in effect that interest would only be given by way!
damages for the wrongful detention of the money as the company was not in default. The opinia Lord Justice James supports the view that to put to company clearly in the wrong the assignee should have clothed himself with the character of prival But the guilt of default (if It is to be called so) was his side because that was not done which it was period clear was open to the person in whese tight & The interesting property of solid bodies (discovered lately by Mr. Carnelley), in virtue of which they can be liquefied by heat only when the pressure quired to complete his title." This is manifestive. But it would be doubtful whether the assigned stark be compelled to this where the policy was whollt " signed to him by a proper justrument empowering his to receive the money and grant receipts therefor for Fenner or Means, 2 W. Bl. 1269.

Evidence was given in this case that the compart had kept the money ready to meet the deman L. J Thesiger was of opinion that even if it had to peared that the company had used the money the should not be mulct in interest, as there had been 20 default by them.-Canada Law Journal.

-Lumberi g operations in the Belleville dataare reported to be unusually heavy this season well-known firm have six shantles, employing 67 men and will bring 150,000 pieces down the Man and 250,000 pieces down the Trent.

-Quelph Mercury - Mesers, D. McCrae & Co. 54" purchased the buildings on the Allan estate, 240 the river, which they intend fitting up at once is the manufacture of shoddy and worsted. They will see mence immediately to make necessary alterations and additions to the buildings, and will at first . 3.3 three act of machines, with new machinery of and bolter. It is expected that the factory will 'e running order before the spring, and that between and 100 additional hands to those already in the coploy of the company will find work.

-For the year ending 50th June, 1879, Canade to ported 6 921,911 lbs. of ton from the United sizes. For the 7/h and 1,763,529 from China and Jajan For the 1/2 ending 30th June, 1880, we imported but 2,0 (431) lies from the United States and 3,751,954 lies from China and Japan. For the year ending 30th last, 1879, we imported 71,811,708 be. of surer from the United States and 12,896:657 from the West Index For the year ending 38th June, 1880, we imposed that the test states are the year ending 38th June, 1880, we imposed that the test states are the year ending 38th June, 1880, we imposed that the test states are the year ending 38th June, 1880, we imposed that the test states are the year ending 38th June, 1880, we imposed the test states are the year ending 38th June, 1880, we imposed the test states are the year ending 38th June, 1880, we imposed the test states are the year ending 38th June, 1880, we imposed the year ending 30th last, 1875, we impose the ye but 10,251,481 lbs. of sugar from the United States 25

### RAILWAY MATTERS.

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### THE PACIFIC RAILWAY

In commenting on Canadian rallway affairs Herary Enlang Lured says that it shall naturally at a the course of the above line with much intraat a sur course of the meeter sine with much inter-bt. because it will certainly endow Canada with a on North-West. Canada has intereste an enormous pritory which is practically now of little value, or Causilian railways have not been carried into But when once the iron horse can traverse the at North-West, a new era must commence for that parter of the world Hernpath, however, is frightordateut the cold; the North-West affects the Ength imprination to day much as Canada did forty ears ago. It declares that the great question appears to be a to be What kind of climate has the North-Test? And declares that despite all it has heard nd real upon the subject, it cannot altogether ge doran impression that the North-West is much too old to admit of a vigorous development on its imsense surface of the civilization and industries of rest Britain and Europe But goes on to say that if wrong in this, at any rate, lingering impression shall be greatly plensed, because if the North-Wost cally offers favorable climatic conditions to the coglish settler, it must become, with the aid of the nadian Pacific Railway, a highly Important quarter anadian Pacific Ballway, a mixely canada

- len combinations in the United States control 0,000 of the 85,000 miles of railroad and are rapidly saing in the rest. A commission in Wall street, lew York, now dictates the rates which shall be racted for carrying and how the receipts shall be fyiled among the companies.

... The directors of the Union Pacific Hallroad Comany have unanimously agreed to increase the capital ock \$10,000,000, to be offered to stockholders of cord February 6, at par, in proportion of one share new stock to firm of the old. This stock in issued the purpose of increasing the facilities required the large increase in business,

Jan M. Laren and C A. Pew, of Ottawa, and feers McLennan and Boulton, of Toronto, are seekc memperation as the Hull Mines Railway Com-They ask power to construct lines of rallway rom the Hull Iron Milnes to the Ottawa and Gatineau vers, and for power to use the Chaudlero railway nige on the same terms as other companies

At the close of the annual meeting of the shareolders and directors of the Grand Junction Bailway company on Tuesday afternoon, the advisability of re ting a grain elevator in connection with the road adiscussed Mears, Bickford, McDongall and Cowan taied that if half the money necessary for the erec-tion of an elevator were raised in the city the comany would supply the other half required

-Great Western Italiway of Canada traille for week

ding January 28th,	1841' AV	e we tottom	' <b>i</b> —
l'assengera Freight and live etc Mails and sundries		•	\$27,388 (10,749) 2,673
Total	last year		29.470 8.42 00.0
legrase	•	••	\$7,3)1

- The traffic returns of the Grand Trunk Ralinsy of the week ending January 22, 1881, and correspond

g week last year were —	1941.	1880
i .wengere, maile and express	117,015	137,40
Total	\$100,877	8177/NS
In manager (MI)	13.277	

The aggregate increase for four weeks is -The Chicago & Alton gives special notice that our- wheel cars, maximum lead two thousand pounds, will be charged for at the proportion of car-load rate but for not less than eighteen thousand pounds; that is, if the contents of a car is ninetven thousand counds and the rate made is \$12 per cur of twentyour thousand pounds, the rate to be charged will bear the same proportion to \$12 as ninete a thousand pounds bear to twenty-four thousand pounds.

-The Northern Railway Company bill, which has yet to receive its second reading in the House of ommors, provides that bonds may be issued on behalf of itself and the Hamilton and North-Western liailway Company to the extent of £250,000 sterling ,it ne casary, for the purpose of working and improving the roads—the Northern to leans £176,000 worth of bonds and the North-Western £75,000 worth. The bonds shall rank next after the third preference lunda

-The Canada Central Rallway Co, will increase the number of their locomotives, cars, ele date, owing to the increased traffic on the line. The receipts of the Canada Central Railway since the tange of gauge and the addition of the car-ellp and ferry have been over \$100 000 in excess of a similar osting \$15000, has recently been added to the rolling stock of the railway. It is handsomely filled up.

-The Chicago Times says an important announce ment at least semi-official in nature, is to the effect that the syndicate owning the control of the St. Paul, Minneapolis & Manitolia Rallroad, are seriously canrassing a project recently auggested for an extension of that road to Chicago, by an air line route. The line of its extension when determined upon will, it is reported, follow a route considerably south of both the St. Paul and North-Western roads, and will not touch at Milwaukee

-The mileage of railways in France at the end o into was 14,180 miles, and the reported cost of construction was \$1,976,215, averaging \$130,650 per mile The average cost of the 84,715 miles of railway in the Lund States at the same period, with equipment, is transled at \$58,000 per mile. While readways and buildings on French lines average much better than our own, their equipment, rate of speed, and accomtheir rates are considerably higher

-The North American says that the Baltimore & thio liailcoad Company is intent upon plans for a new road from liaitimore to Philadelphia. The company is reported to intend to utilize the act to incorporate the Delaware and Chester County Railroad Company, passed at Dover in 1867. The act provides that the company may have its line where it may connect with any roads now built or to be built in l'enneylvania or Maryland, and that when it may be deemed advisable the capital stock may be merged With such roads.

.The tests of the durability of steel rails on the Orest Northern line of England, show that the harder rails do not wear the best. In one instance a hard double track, standard gauge, steel railed, and so be rail was worn away one-sixteenth of an inch by a completed in two years at the latest.

truffic amounting to 5,251,000 tons. A softer rail near by was ween the same amount by \$402,000 tone In another Instance the total was 15,531,000 tons for a hard rail, and 31,061,000 for a rott rail, the weer and tor" being the same-one sixteenth of an inch. Analysis showed this last rall to consist of 99,425 per cent, of fron and minute quantities of carbon, phosphorus, silicon, manganeso, sulphur, and copper-

-Another great bridge is to span the turbid and changeable Missouri The Northern Pacific Company has let the contract for a mic from structure at Bismarck, to consist of three spans each 100 feet long, and two short apins of the net each. The foundations will set on the blue clay and sandstone 45 feet below the cotton of the river, and the spans will be 75 fort to the top above low water mark. The length, in-cluding treatle work, will be nearly a mile, the coat will be user Show, 650, and the work in to be completed in a year from the coming spring. So science intinues to overcome the obstacles interpreted by nature, and the waterways surrender to the railways.

-Extraordinarily low freight rates are not unknown in the Eastern States. Thus the average rate per ton per mile on through husiness received by the Northern Rallway of New Hampshire fell from 1.74 in 1873 to 0 42 per cent, last year—a charge not suffi-cient to pay the cost of hauling. Considering the mountainous character of that State, the heavy cost of rallway construction and operation, and the comparatively light local traffic, this is a far lower rate that the lowest reported average on any western read, small as that has been in many cases. Of course, no company could long endure such ruinous rates, enforced, however, in this case by a connecting road and not by law.

-The Northern Pacific Company are making ar-rangements to build a road from Thompson Junction via Superior city to the Montreal river to which point the land grant of the company extends; this road, in connection with other interests beyond, will make a through line to the Mackinaw and up the Sault. This line is without special reference to connection with the Wiscousin Central The connection of the latter, however, becomes a matter of course, in view of the fact that the contemplated line will cross that The Northern Pacific will also extend a road from Rice Point at Duluth to Superior city, thereby connecting the two places and forming a triangle which can be used at its convenience and which will largely benefit both places.

-It is said that about 2,000 cars of freight bound east crowd the New York Central yard at De Witt The Syracuse Herald says "Since the great blockade some weeks ago there has not been so large a number of freight care to go cast as there was this morning Every available track in the vicinity of Syracuse has been put into requisition for the purpose of branching cars. The DeWitt vard is full to overflowing. The track round the lake is blocked and track No. 3 is filled with cars beyond Warners, all eastward bound. The singuler part of this business is, that this morning there was not a single eastern crew ready to go out and it is much as Major Priest's men can do to take care of the trains as they come in without doing much to relieve the road of the extra trains packed upon It. this immense quantity of castern cars are on the road, there are only about 100 cars to go west."

-A wonderful locomotive, built at Paterson, NJ for an inventor, who in his design turned the ordinary locomotive topsy-turvy and imparted power to the driving wheels by friction, has been tried, and is seld to have given remarkably good results in drawing heavy louis up grade, but it has not yet been tested for speed. On an up grade of about 124 feet to the mile, the engine pulled twenty-one cars weighing over 424 tons, with such ease that more cars were wided to the train in successive experiments, until finally thirty-nin- loaded cars, weighing 862 tons, were pulled over the same grade with from 135 to 140 pounds of steam. In this engine the cylinder and the moving parts are above the boiler, so as to permit the use of double drivers, one set above the other, so proportioned as to give great speed to the drivers, resting on the in , and to which power is imparted by friction.

-Upwards of 150 men, save the Quebec Chronicle, are now employed at the Q M. O & O. Rallway work shops, foot of Crown street, putting in and fitting necessary machinery. Already \$440,000 has been expended in this work. The bollers and most of the machinery are now in, and in about a fortnight it is hoped that steam will be turned on. A number of locomotives have been already repaired and rebuilt here, and many more remain to be done. The fore-man complains, however, of the difficulty of obtaining machinists and iron workers used to locomotive repairing Several of such are now required at the shops. During the year it is the intention of the A few baggage and second class cars will also, in all probability, be constructed here. Mr. Davis expects to employ in the Quebec shops, fully 200 hands this summer Most of the iron castings used on the road are obtained from Carrier, Laine & Co, et Levis, several of the brass castings from Mr. Mulholland, of this city, where all the timber is purchased In Quebec.

-The construction of the Ontario & Western is now fairly under way and a new trunk line to the West is only a matter of a few brief months. The line adopted, and on which construction is progressing starts from the river at Hoboken, passes under the hill by a tunnel, and extends northward beyond the Palisades to Haverstraw, and from thence follows the banks of the Hudson on the line located by the defunct New York, West Shore & Chicago road, tunnelling under West Point, to Cornwall. From here the line leaves the river and continues to Middletown where it joins the Oswego Midland, which it utilises as a portion of the main line to Oucida. From thence the line again takes up the New York, West Shore & Chicago route to Buffalo, where connection has been secured over the International Bridge to a connection with the Buffalo & Godorich branch of the Grand Trunk Italiway of Canada, and over the connections of this line to Detroit and Chicago. From Cornwall north they propose to extend the line to Athens, opposite Hudson, and thus amalgamate their line with Athens branch of the New York Central to Schenectady and Albany. They also propose to construct a branch from Miduleton West to the coal fields of Eastern Pennsylvania. The project is a very comprehensive one and involves some pretty stiff work in construction. In the main it opens up new sections of the country much in need of railway facilities. The execution of the plans of the company is in energetic and experienced bands, backed by capitalists of ample means. The leading spirits in for-warding the work are Mr. Woerishoffer, Gen. Winelow and Gen. Horace Porter. The road is to be a

#### MINING NEWS.

NOVA SCOTIA COAL MINES.

The returns from the various coal mines in the Province for the year 1880 have nearly all been re cived, and the results shown are of the most satisface The amount of sales during the year tory character has been as follows -

to All tone (long). lit gunmer ... 221 (1.56 (113.00) (113.00) 954,64

This shows an increase of no less than 206,035 over the sales of the year 1879 a development in one year of upwards of 3.4 per cent.! The highest amount of sales ever before reached in the history of our coal mines was in 1873, when under the influence of the previous duty on American coal it reached 881,106 ons Thus the year 1860 has been the most successful in our history, the sales exceeding those of 1873 by no less than 73,553 tons. We are assured on excellent authority that had it not been for the terrible disaster to the Hallfax Mine at Stellartor, by which that-the largest mine to the Province-was closed for nearly the whole of the last quarter, and business at the other lictou mines deranged for some weeks, the total sales for the year would have, an doubt, exceeded 1,000,000 tons. As it was, the total output for the year reached 1,833,710 tons. We are happy to learn that from preparations now being made, and from contracts now actually offered, there is every reason to expect a very large further increase and development in our coal trade during the current year. Every well-wisher of the Province must cordi-ally desire that it may be so, as a proper development of our coal wealth must not only be of immense direct benefit to our people, but will also indirectly atimulate other equally remunerative industries.-Halifar II-ral !

#### BRITISH COLUMBIA

The Yale Ledge Silver Mine continues to open out Mearrs, Rulo and Tremayne, two experienced Cornish miners, have completed their contract by driving across the lode in the Fannie Miller claim," which shows a masterly vein, 35 feet wide. A thick, creamy flookan prevails in each wall, and a more keeltle, looking lode cannot be seen in any country. It runs north and south, with a westerly dip of 15 degrees; the ledge is composed of calcediny quarts, oxides, mundice, chloride intermixed with spots of galena and sulphides of allver ore, these prospects have given new life, and there prevails a more hepeful tone in the future prospects of the Yale mines. The recent important discoveries augur well for further developments during the year of opening out richer deposits of allver bearing ore. As the work progresses on the " Fannie Miller claim" the quality of the ore improves towards the hanging wall, presenting very favorable indications of yielding richer ore as depth is attained; the time samples of ore are evidences establishing the fact that time and capital are only the main-prings necessary to open up and set in motion a mast field of mineral producing property. Favorab's mining reports from up country. Better days in stoic for Cariboo - Inland Sentinel. Yale, B C.

### SALE OF MINING LANDS.

The most extensive and important sale of mining property, probably, which has ever taken place in this county has just been campleted, the bargain having been closed yesterday The Cambria Iron Works, of Johnstown, Pa, represented by Mr. Elder, solicitor of the company, and the South Bethlehem Iron Works, Pa., represented by Mr. J. D Broadhead, president and solicitor of the company, purchased from Mesers. Lonstorf and Mass, Negaunce, Mich. and Mesers. Mitchell & Coe, of Madoc, the Dufferin and Nelson mines. The exact price paid for the mines cannot be definitely ascertained, but it was in the neighborhood of \$60,000. The purchasers first obtained a deed of the property from the Ontario Mining Company, which is composed of the four gentlemen named, and afterwards a deed from the four individually in confirmation of the first deed. Mossrs. Elder and Broadhead, on behalf of their respective com-panies, also purchased from Mosars. Wm. Coe, Arthur W. Coe, and John P. Mitchell, their interest in the residue of the term of the lease of the Wallbridge Hematite Mine (13 years). The price paid was \$20,-000. The two companies are to operate these three mines together, the Cambria Works being represented snops. During the year it is the intention of the by Mr. J. B. Merell, and the South Bethichem by Mr mechanical superintendent, Mr. Davis, to have constructed 300 or 400 platform cars, and 200 or 300 box cars. A few baggage and second class cars will corporations engaged in the iron industry in the United States, and it may safely be said that the great purchase just completed by them will prove an era in the history of mining in this county. They assert that this year they will get out 270,000 tone of ore and in two or three years, when they will have all the required machinery in operation, they confidently anticipate that the yield from these mines will be 700,000 tons - Belleville Intelligencer

#### MONTAQUE GOLD MINES.

Negotiations for the purchase of a large block of areas by an American Company, and arrangements for placing a first rate crusher with the latest improvements in amalgamation, promise to revolutionise mining in the district, the system heretotore adopted by some crushers here being of the rudest description Already in anticipation of the boom that must come with the advent of spring claims are being rapidly taken up on every known lode, and it has been found necessary to extend the proclaimed district both east is understood that the Government is a great inducement in the way of a prise at the ... omision Exhibition for the best process of amalgamation, which must of accessity have the effect of greatly eliminating the mining resources of the country. It is understood that expersts sent here or resolution. As in the second session of the Con-last summer in the interests of capitallets have reported very favorable from the fact of such great returns having been got from the present most primitive process of extraction. Messra. Kaye, Symonds & Co. have opened up an 18 inch lode, some 2.000 feet west of their eld workings, ten tone having been crushed gave three ounces to the ton. The new opening on the Rose lode promises to collipse anything ever yet seen in Montague, and arrangements are being made for opening new shafts along the entire length of the property. The barrel lodes are being tapped in several directions, and show well, and prospecting parties are waiting anxiously the approach of spring to resume operations - Halifez Heraki

-Among our other industries gold mining appears to be feeling up. We noticed a few weeks since, that Mr Joseph Townsend had struck a very rich lead on his property at Tangler, and we are glad to learn that this lead continues to produce very time gold bearing quartz, and that he has, within a few days, taken very rich specimens of gold from another shaft, which he is now engaged in sinking. Tangier will, no doubt, be a prosperous locality during the coming year Tangier will, no doubt, Halvas Herald.

-A munber of English coal taines are being worked under the ocean. In Northumberland the net available quantity of coal under the sea is estimoted at 493,070 and tons, and on the Durham coast under the sea, including a breadth of three and a half miles, with an area of seventy-one square miles, 734,500,000 tons. The latter mine la la a vela of an aggregate thickness of thirty feet, distributed in six seams. Engineers are considering how it can be worked successfully to the future,

-The Marquette Mining Journal and Negaunce Iron Herald give the entire output of the upper pen-insular Iron mines for the year just passed as being 1,075,602 gross tons, at the approximate value of \$17,201,000 on board vessel. This is a mistake. The total out-put of the mines of the upper penincular for the year 1880 was 1,987,536 gross tons, valued approximately, on board vessel, at \$17,220,693 mistake was made, evidently, by including 8,066 tons of quartz as ore shipped from the mines-Nerway Iron

-Quickellver is the second mining interest in Callformia. It is obtained from its sulphuret, or clausbar, which occurs in deposits in the Bleirs. Nevada and triassic rocks in the southern part of the State, but most abundantly in the Coast Range. In 1870 there were four establishments for smelting quicksliver, of which two were in Banta Clara County, and one each in Presno and Lake counties. The capital invested was \$3,500,000; wages paid during the year, \$181,-000, value of materials, \$837,800; of products, \$1,927,680. The New Almaden mine, in Santa Clara county, the oldest and most extensive in the State produced from July, 1850, to December, 1867, 35,333,-586 pounds of quicksilver, or 401,887 flasks, from 214,775,175 pounds of oro The total production of the State in 18-9 was 33,600 flanks, in 1870, 29,546, in 1871, 31,881. The exports of quickellver from San Francisco during the five years ending with 1871 amounted to 126,707 flacks, of which 51,316 were to China, 42,391 to Mexico, 11,600 to South America. and 10,700 to New York.

-West Virginia is developing an astonishing amount of railroad enterprise Charters for seven new railroads have been fesued at Wheeling within a few we ke past. Among these are the Baltimore, Cincinnati & Western Railroad, already mentioned, the Big Sandy & Great Southern Railroad-principal office at Charleston-with \$1,000,000 capital; the new Mar-tinaville, Middlebourne & l'ennahoro lialiroad, capital \$1,000,000, running down near the south-east bank of the Ohio in parts of Wetsel and Tyler counties where there is no milroad now, the Keyser & Pendieton Railroud, \$2,000,000 capital, to run from the Baltimore & Ohlo railroad, in Mineral county, through Hampshire, Grant and Ha dy countles to Pendleton county, possibly, too, from part of l'ittaburg's southern connection with the Lexington branch of the Richmond & Allegheny Railroad, and the Buckingham & Western Bailroad, connecting the seats of Upshur and Lewis countles. But the blugest of all has not pub-lished its intentions—the West Virgin a Railroad ('ompany, capital \$25,000 900.

-Oreat mines are often discovered when least expected. The following is told at the discoverer of a guich that has yielded many millions. He had followed mining and prospecting for forty years, had been all through California, Colorado and Montana, and had prospected for twenty-five years in Georgia before coming west. He was not much at digging deep holes, but he would go round hunting for shallow diggings so long as the boys would "stoke" him. He was getting worn out prespecting and when, on the 24th day of July, 1864, he camped on a tilbutary of Prickly Pear Creek, in Northern Montana, he said to his three companions, "Let's sink a hole on that bar, its the last chance; if we can't find it here I don't know where next to prospect," younger members of the party put the hole to bed rock, the diggings were named Last Chance, and two years later the old man threw away his tools and went nome to Georgia with a joyful heart and \$100,000 in clean gold dust, but not until he had seen the city of Helena, the metropolla of Montana, spring up about him.

It has been decided to make flannels at the mill being built by the Mesers Gault, at Campbellford The buildings are to be completed by July next, and will cost \$40,000. Nix sets of machinery will be used, empleying about 150 hands

-As a part of the scheme for colonising the Holy Land with Jews, it is proposed to bring the western terminus of the Euphrates Valley Railway down from Alexandretts to Haifs. At Juxandretts the greatest engineering difficulty is encountered at once, in climbing the steep hills which inclose the harber. In Palestine a similar difficulty presents itself in the passage of the Jordan Yalley. The most favorable settimate of the grade is as follows: From Haifa the line would follow the Plain of Esdraelon and rise to its watershed gradually, only two hundred and fity feet in fitteen miles, but then, taking the wide passage of the valley of Jesreel towards the Jordan, it would fall nine hundred feet in the next fifteen miles. Theuce, after crossing the river, it would have to ascend to the highlands of the Hauran, by means of the chasm of the Yarmuk, or Hieromax, at the rate of one hundred feet per mile and to the unbroken extent of three thousand feet in thirty miles. It would then be readily carried to Damascus and Aleppo .- N Y. Indezendent.

-According to a recent return, the printing bill of the Uhited States Government for the year ending June 30, 1830, amounted to \$2,000,000. This year it is expected it will show an increase of \$360,000. ,900 copies are printed of each document or report of either House of Congress, and 924 copies of each bill mittees, the printing press was kept pretty busy. The cost of printing a full report of the debates in the Congressional Record is set down at \$120,000, six to seven thousand copies being printed. The Index alone cost over \$8.500 for compiling. The printer reports that he struck off in the twelve months 131 million " blanks," envelopes, etc., 17 million pamphlets and documents, 341,000 tlank books; 329,000 memorandum blocks, and 39,138 miscellaneous bound volume. The cost of producing some of the official reports is very heavy. Lithographing and engraving cost last year \$140,000. Printing one report—that upon diseases of swine-cost \$14,000.

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Trialded	*****	36 <b>6</b> 55	Window Olass, per 50 ft, ordinary 4th quali	ly: 1 M of 190
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" roediess mata " old " blook basket	* *******	9] 🐠 10	Ulive Paim, # 1b ParanneCanadian & est	1 26 # 1 32 0 05 # 0 06
Bergines, querters			American Petroleum, refined, carloads	0 40 0 0 45
Sultanas Valencias	••	17 m 19 10 m 11	Seal, Pale, ordinary Seal, Straw	027 # 025 060 # 065
Layers recilises mata old lyack basket blue Bardines, quarters haives Sultanas Valencias Walnuts Walnuts, Grenoble, genul African Glager Allapice	o•	85 9 88 80 80	Ball Button  Cod, Gaspe, & Emperial gal.  Newfoundland, do Lard, Extra  No I Linwed, boiled, & gal Palm, & ib ParanneCanadian & gal American Petroleum, refined, carloads in smalllote Seal, Pale, ordinary Steam refined Seal  NAVAL ATORES.  Coal Tar OakumNavy Pine Pitch	0 70 🕳 0 731
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Chesia		15 6 16 12 4 16	Pine Tar Regin Strained	300 # 350 450 # 500
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De white .	PICE.	20 0 22	Jule C Cotton "Sail, conversions	0 06 @ 0 00 9 25 @ 0 30
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2 1000	•	71 6	Belmont Sperm. Mould, Montreal	0 19 @ 0 201
Coarse (10 to the ton)		55 de 60 2 00 de 00	Paradno, 12a & 6q	. 0 j9 <b>- 0 21</b>
Hureks, bage halves quarters Factory Filled	* **** *	- FA	910 190v	<b>M</b> • M
Canned Fish— Lobster, 11b cans— Macheral, Raimon, Dry Cod (Gaspe) Greec Cod in barrels— No. 2 Large do., draft, No 1 Hierrag, Labrader Canso, No. 1 spli Lake Superior White Fish No. 1  No. 1  Rolling To Salmon Tr. Columbia River Salmon, No. 1  Roaled Herring Split Mackerel, No. 1	Pibh.		American Canadian Siemene Carnbrie Colineas Eginton Gattaberie Glengarnock, per ton Hematite Summerice	25 00 32 25 00 1 19 50 20 50 50
Macherni,		20 # 160 120 # 150 155 # 2 M	Kel'nton. Catteborie	11 FD # 25 00 19 50 # 20 50 21 50 # 22 M
Ureen Cod In barrela No. 1		4 (4) (4) 4 25	tilengarnock, per ton Hemstite . Summeriee	27 00 # 28 00
No. 2 Large do., draft, No 1		3 00 0 3 25	Canadian Slemens	
Herner, Labrader Canso, No. 1 spli	·· ·· ·	5 50 m 5 75	Lowmoor and Howling (under 250 th) Scotch and Staffordshire, per 100 lbs	650 0 700 186 0 196
Lake Seperior White Fiel Selmon To	h, half barrels	4 50 W 4 75 4 25 W 4 50	Canadian Siemens Lowmoor and Howling (under 250 th) Scotch and Staffordshire, per 100 lbs Blest do do Swedes and Norway  CANADA FLATES.  Arrow and sound	2 25 m 2 50 4 50 m 5 00
No. 1	,	17 00 6 00	ATTOW and equal Clifton Hatton Swansea and Penn , per box TIN PLAYER. Charcoal, I C, per box	3 60 9 3 50
Scaled Herring	•	16 00 # 00	Hatton . Swantes and Penn , per bog	3 10 # 3 15 0 # 3 25
" " 3		6 00 ap 10	Charcoal, I C. per box	575 🕶 600
Brandy, Hennessy's, per g	LIQUORS,	440 40 400	Charcoal, I C, per box Charcoal, I X Charcoal, D C Coke, I C 14 x 20, 250 extra.	7 775 <b>(a)</b> (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c
Martell, per gal	***	10 75 60 11 60	14 x 20, 250 extra.	1.0 2 00
Otard, Dupny &	Co., ♥ ml	3 85 # 4 95 3 30 # 3 40	Charcoal (best) No. 26	11 00 # 12 00
Vine Grewers' Co., P. Unlary & Co., P. Lulas Roben's.	o, 7 gal gal , gal	3 30 # 3 40 3 30 # 3 40	Morewood's Line, No. 29	. 32 3
Riviere Gardrai Renault's, Paul	k Co., ♥ gal	3 10 # 3 15 3 30 # 3 40	Sheets, best brands ,	2.50 <b>2.75</b> 2.60 <b>2.75</b>
J. Denie, H. Mou Arbouin, Mareit Do Leare, File A	nie at Cu., P gal. & Co., P gal	330 W 340	Cast, per lb Sleigh Shoo	19 2 13
Rum, Jamaica, 16 o. p., pe Demerata	rgel .	276 - 300 276 - 300	Spring, per 100 lbs Hest ds, warranted.	3.50 # 4.00 1.00 # 6.00
Uib, De Kuyper's, red can		2 15 @ 2 35 7 90 @ 8 10 4 79 @ 4 30	BOILES PLAYER, That has I made in team	3 50 # 3 78
" Blandenheym & Note other brands	i rt.	2 46 # 2 15 1 96 # 2 46 1 96 # 2 46	Lowmoor and Howling, under 280 to Urdinary brands, best, \$2.00 to	3 6 80 # 3 78 6 80 # 7 00 2 75 # 2 201
green, other brands,	per case .	376 # 397 7 # 7 30	Anchors	600 AM
Burnett's Old Tera, cases wood	***********	562 6 67	Charcoal, I C, per box Charcoal, I X Charcoal, D C Coke, I C 14 x 20, 250 extra.  TINKED SHERTS.  Charcoal (best) No. 26  Morewood's Lion, No. 28 (Mberbrands, No. 28 (Mberbrands, No. 28 (Mberbrands, No. 28  Hoops and Hands, per 100 lbs. Shoets, best brands  RYREL  Cast, per lb Meigh Shoe Spring, per 100 lbs Hest d', warranted Tire do  Boille Flater  Bot best brands, \$\phi\$ 100 m  Lownoor and Howling, under 200 m  Urdinary brands, best, \$\phi\$ 100 m  Lownoor and Howling, under 200 m  Urdinary brands, best, \$\phi\$ 100 m  List B. S  List D. S  (Times Nalls.  Cat Nalls, per 100 lbs;  Id and 94 (2) and 21 in.)  64 and 64 (2) and 21 in.)  64 and 64 (1), 11 and 11 in.) A. F.	10 50 2 11 00
Highwines, U. C. p. Imper Rye Whistor, Imperial co	ial gal., in bond. I., in boad duty naid	70 0 00	List D. 8 (Tineh Nalls	13.00
Base' Ale, quarte	,	100 100	10d to 6d (3 is, and larger)	280 0 0 0
waterest Stout, quarts pints	· · · · · · · · · · · · · · · · · · ·	155 2 160	of and 74 (2 and 2) in.) 44 and 5d (1), 1] and 1] in.) A. P	. 3 90 <b>6</b> 000

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#### WEEKLY REVIEW.

MONTREAL, February 9th, 1881.

The stock market was generally weak to-day, lower values ruling. Montreal dropped to 1761 at the opening of this afternoon's Beard but immediately railied and sold at 1762, closing at 177 asked, 1762 bid Ontario was 1762, closing at 144 seller, 1622 buyer. Molson's was steady at 107. A very small business transpired in Merchanta's at 117, being a deciline of 1 per cent. Commerce was about steady, with sales at 137. In Montreal Telegraph a steadler feeling was evinced at the close, the stock being placed at 126 and 1262. Richelieu was weak, selling down to 551.

A general improvement has taken place in the English wheat markets, prices having advanced about 6d per quarter all round. Medium Chicago and Milwaukee wheat off coast is od bigher, at 44s 6d, and red winter off coast has also moved up 6d, and is now quoted at 45s. No. 2 Chicago spring is 6d dearer, at 43s 6d. The imports of breadstuffs into the United Kingdom during the past week were: Wheat, 290,000 to 295,000 quarters; corn, 85,000 to 90,000 quarters; flour, 190 to 195,000 bbls. This shows an increase as compared with the week previous of 185,000 quarters of wheat, 10,000 quarters of corn and 70,000 bbls, of The amount of breadstuffs on passage for the Continent at the moment comprises 290,000 quarters of wheat and 65,000 quarters of corn, against 330,000 quarters of wheat and 170,000 quarters of corn a week ago. In Chicago the wheat market was steady, No. 2 apring closing at 98 jc. March, 99 jc. April. The stock of wheat in Chicago at present is 7,811,383 bushels, against 7,712,588 bushels a week ago, showing an increase of about 100,000 bushels. In New York there was a steady feeling in wheat at about yesterday's quotations. In this market the only trading in grain to-day was the sale of two cars of No. 2 Canada apring at \$1.20, and a car-load of oats at 35 c. per 32 lbs. The flour market was dull, the only transactions re-ported on Change being 100 bble, superior at \$5.30; nne at \$4 35; 100 middlings, \$3.65, and one car of Ontario legs at \$2.55,

Western provisions were rather unsettled to-day with lower prices ruling Pork in Chicago was knocked over, and fell 20c per bbl. to \$14,40 for March, \$14 574 for April, at which figures it got up, and recovered some of its lost ground, closing firmer at \$9.52\ to \$9.65 for March, \$9.62\ to \$9.65 for April, being a drop of loc since yesterday. Land did not share in the decline tut closed somewhat firmer at \$9.52\ to \$9.55 for March, \$9.621 to \$9.65 for April. Hogs were firm, and 5c to 10c per 100 lbs. higher, the receipts being very light. In this market we have to report the sale of about 130 barrels of old mess pork at \$17.50. New Canada mess pork is very firm at \$18 to \$19 per barrel as to size of lot. Lard is firm also at 12 c per 1b, a lot of 125 pails changing hands at that figure. The thaw has not yet made any unfavorable impression on the hog market, \$7,775 being refused to-day for a carload of heavy dressed hogs. In new smoked ham there is a small trade passing at 121c to 121c per lb. The egg market is steady, sales having been made today at 35c, but any increase in receipts will flatten out prices promptly. The increased supply, however, which has been talked about does not put in an appearance, and consequently holders have things pretty much their own way. Ashes are steady.

The butter market was remarkably quiet to day, and prices had a still easier look about them. Stocks here and in the country are plentiful enough for this season of the year, and it the shipping demand does not spring up, as it is expected to do later on, there will be more old butter offering than people are aware of. About half a dosen different times this season. Quebec was reported to have been cleaned out of Kamouraska stock, and now we find that several lets of that kind of goods are being offered in that city to parties here. Fine goods are scarce and wanted for the local trade, but poor and medium grades are just now waiting for anything like a decent turn up. The local trade appears to be taking more rolls just at the memore, several good sized lots having changed hands in barrels and cases at 17 to 200 per 1b. The cheese market is steady at about former quotations, but no

public rable seems to hang on 68s, ulthough advices from Liverpool report sales at the Beerbohm's advices this morning week at Floating cargoes. Wheat, improving the factor Cargoes on passage. Wheat, theme, both maise, firm. Good cargoes red winter wheat to 45s id, now 45s id. No 2 spring, 44s, how 45s id, now 45s id

#### CANADIAN CARLIAMENTAM NOTES

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The principal clause in Mr. McCarthy 3.5.
Act respecting the Court of Maritime June 1.5.
the Province of Ontario," provides

The Minister of Customs brought down day resterday showing the names of all patties who have imported wheat for the purpose of grinding in least also the quantity imported by each parts, with making dates and ports of entry, also the quantity of exported by each party and the dates, from the exported by each party and the dates, from the April to 1st December, 1880, also, the dates of the bonds given and the dates they or any of their west cancelled, and in what manner the bonds were we called, whether by export of wheat or flour or by the returns were the returns as

returns	_		-
Wheat Imported.		Wheat Kz	
	Bush-	Wheat, Bush-	In Pront. But-
	Oid.	ole,	re.
Ontario	571,5% 513,60	74,580	ह्य (त्र क्षेत्रस्त्र
Totale	1.45.60	74,580	1.3.465

Mr. Rotertson (bhelburne) moved for an addies to correspondence in reference to alleged insic mustatistics submitted to the Halifax Commission notthe Washington Treaty. Mr. Robertson announced that, as the result of a cateful examination of the evidence, he had come to the conclusion that to charges preferred by Prof. Hinds we baseless Tois a subject which has occupied considerable attention of late, not only in this country. but in Great Bring, and the United States. A few Americans are judient over Prof. Hinds's discovery," and upon it have been some very discourteous remarks regarding the manner. of preparing the Canadian case; but so far the United States Government have not shown a dispositio, to regard the charges as serious. The Hon J C, Pope Minister of Marine and Fisheries, having made a bristatement, in the course of which he declared to charges baseless, Sir Albert Smith, his producers of a office, made a short speech in repudiation of the Holds allegations. He expressed the opinion that if the Government of the United States seriously believed that the charges had any foundation the Government of Great Britain and Canada should cause an inquer to be instituted. Mr McDougall could not understand what grounds Prof. Hinds had for his representation, which Le also regarded as baseless. From what is could learn the so-called trauds told against the Canadian case rather than against that of the Americans. He supported the suggestion of Sir Albert with and added to it that if an international inquiry should take place it should cover the case of the Tribel States as presented before the Geneva Commission. The probabilities are that usless the United Num Government be disposed to take action, Prof. Biode will be allowed to follow his ignis fatuus to the extention. his feeling of personal disappointment may urge in

#### STABCII FAOTORY.

At a public meeting held in the Uigg (New Embediek) Hall, to discuss the advisability of encourage capitalists to start a starch factory in that vicinity, the following resolution was carried unanimously—

"Whereas, this meeting, in view of the limited demand for our surplus potatoes, is desirous of encouraging any enterprising party or parties who wish to build a potato starch factory in this vicinity, vir on the head of Orwell river, as the locality is well suited for such an undertaking, such as clear streams, large quantities of potatoes grown, etc.

for such an undertaking, such as clear streams, lawquantities of potatoes grown, etc.

Resolved, therefore, that we promise, agree and bind ourselves severally to furnish said party or furties, for the use of said factory, the produce of the amount of land set opposite our names at 14 cents probushel, for the term of five years."

A committee was then appointed to receive the names of those willing to subscribe their names, and the number of acres they would guarantee, after which a public meeting was held in the above named half for further discussion. The committees lists showed a guarantee of the produce of one hundred and thirds two acres, as set epposite each farmer's name. It was moved and carried that a committee of five be appointed to transact any further business connected with the enterprise, after which Mosers. David hots, John A. McQueen, William McPhail, John R. McDenald, and Charles McDenald were appointed and committee. It was moved and carried that the above resolution and minutes of meeting be published in all Island papers, inviting capitalists and offering hearty co operation.

Lis stated in Montreal that the Local Government of Quebec is taking as interestin securing the passage of the charter for the Quebec and Ontario Railway of Parliament, as it will give the Occidental a through time to Turonto and the west.

—A number of medieval Greek poems, left unpullished by the late Dr. W. Wagner, are to be famed under the editorial supervision of MM. D. Bikelas and N. Sathas. Among them are an Achilless in 1,920 inch and an Alexandreis in 3,800.

—A party of fifteen skaters started from Oakville on Saturday and went fully 15 miles in a direct line to Port Dalbousie, which place they could plainly see, when they returned back all safe. This is comething that has not been known by the oldest inhabitant. They state that the ice was fully six raches thick the greater portion of the way.

the local trade, but poor and medium grades are just now waiting for anything like a decent turn up. The local trade appears to be taking more rolls just at the moment, several good sleed lots having changed hands in barrels and cases at 17 to 200 per lb. The cheese market is steady at about former quotations, but no spot sales on shipping account are reported. The

#### THE LUMBER TRADE.

The state of the s

UNITED STATES MARKETS.

The North-Western Lumberman 6074 -The blocking ca the ratironds with snow, coupled with the lad weather, has made a large gap in the business of the week among lumber dealers. It has cut from their sales many thousant fact, and though some of this justness will come to them when the weather inroves, much of it is lost for ever. Let, in spite of all the drawbacks they have bad to encounter, they are made a good record for the week just closing. l'iom most points trade is reported futr, and occasione ally good, which leads to the conclusion that it compares well with the average of former vents, however such it may tall short of what it might have been nder more tavorable conditions. The winter so far has not been a good one for lumber seiling, and it and be looked upon as a very favorable sign that, the ithin anding this, the average of business actually done in the principal markete has been so high, it shows that there has been a consumptive demand of pretty liberal proportions for the time of the year, for it is impossible upon any other hypothesis to explain why so much lumber has been wanted by retail deal-Our readers will hardly look for anything new this week in regard to priors. It only need be said that they are practically where they were left a week are The occasional changes made denote nothing more than slight differences of opinion as to the value of some particular sort of stock, and are not to to regarded as indications of either an advance or a decline in prices. There is just now no general ten-There is no reason why they should be higher, and nothing that requires them to be crowded below their present range. The lumbermen have so adjusted illem that they represent pretty nearly what lumber utting being discoverable than was expected, and about the same general condition of firmness is observed in other markets. Perhaps the most noteworthy feature of the trade at present is the lack of good saw riments. This trouble seems to exist everywhere .lthough there is more lumber on hand, there seems to be unusual difficulty experienced in getting together what is needed to till orders. Even at this point, where there must be upwards of 400, occ,000 feet in pile, the dealers complain that dry stock of many kinds is excessively scarce, and in some of the items that appear on the list, impossible to flad. Much of the lumber now on hand is still green, though it is not so described in quoting, and, green, though it is not so described in quoting, and, buyers, disliking to pay from 23 to 50 cents per hundred pounds for moving water and sap about the country, it cannot be shipped. There are some things, however, at nearly all points that cannot be had, seasoned or unseasoned. Small timber is in such exceedingly limited supply here that it cannot be longest at many yards, and elsewhere we find there is a similar scarcity of special kinds or qualities of stock. Grades of which the supply is so small are held above the market by such as happen to have them, and usually bring readily all that is asked. The mid-i inter season of inactivity is generally considered about over at the close of January, and soon after, indications that the regular spring demand is tegianing to set in are looked for. It is not unlikely that this year the trade may be kept back a little by

proves that the demand is there, and only awaits a reseasably good opportunity to show itself, Chicago.

tad weather; but the letters of enquiry that are

already making their appearance from retail desiers

The condition of trade with the lumber dealers of this city is eminently satisfactory, considering the edverse conditions of weather. Since the 17th day of November there has been not to exceed a dozen really fine days, during which out-of-door work among lumber piles could be carried on wit out the discomforts of severe cold weather, or equally dis-counging storms. During this time the condition of the weather all through the North-West has been such as to largely interfere with all out-of-door work, lessening the requirements of the country trade to just the extest to which carpenters were prevented from using the needful building supplies. Notwithstanding this, the yards of this city have during the month of January shipped 87,600,000 feet of lumber, scoording to the reported figures, or according to our rule of figuring, \$1,370,000 feet, besides supplying the wants of the city. This is an increase of 8,565,000 feet over the shipments of January, 1880, during which mosth, as well as mainly through the two revell out-of-deor labor was but little Interrupted This tact of itself speaks volumes for the present condition of trade, and as it is appreciated to its fullest extent by Chicago dealers, it is no wonder that we find them buoyant with hopeful expectation of what trade will be when more moderate weather shall greet the country. The reported movement of shingles falls a tride short of that reported for January, 1880, another evidence that there is less disposition to repair old buildings, and an increasing tendency toward build-ing new. For the peat week the reported shipments have aggregated \$,051,000 feet of lumber and 1,198,-000 shingles, which means actually that the volume of business has aggregated about 2,500,000 feet per day of lumber, with 300,000 shingles. Should the weather soon improve, the vo' me of inquiries daily made by customers will no doubt vantly increase, but as the boar can see his shadow on this, Candismas, day, there is more prospect of "six weeks sleighing in March" (if all signs do not fall in this cold winter) and a cold snap, for a change, during February, than or any immediate breaking up of winter. A trip through the yards of the city reveals to us not only the contented condition of the lumber dealers, at the present and prospective appearance of trade but a decided desire for information as to what the present stock of this city really consists of From all with whom we came in contact, we learned of a decided shortage in many grades, even in that class of stock which is still considered green. There is par-ticularly a complaint of difficulty in obtaining small timber and many dimension sizes, while dry boards 12 feet long are scarcely to be had. For both these descriptions of lumber the dealers have nearly azbausted their own resources and the resources of their zeighbors, while the endeavor to substitute partially seasoned stock reveals the fact that there is but little even of this to be had. The fact is, that with an apparently large stock of lumber in this city aggregaling not far from 410,000,000 feet at this time,

this city of the necessity of carrying larger stocks upon their yards than heretotore, as these broken assortments. Had the average stock of the yards during the past season been 50 per cent, larger than it was, the ability to fill orders for dry lumber would truth we that numerous inquiries for more dock room, and it is evidently the intention of the Chicago trade to carry heavier stocks in future. Prices are firm. We find a perfect indifference among the dealers as to what prices may be established at other points, and a conviction that lumber is worth all that is being asked for it, and that it will bring it before the equality of navigation. There will be tow if any changes in business location this spring, and there is not the alightest present prospect of a repetition of the experience of last year a carly season

Liverpool the change has been from \$2 to \$5.66 per ton It has cost to carry a ton of wheat from Dakota to New York about \$10 or \$17, and to Liverpool not decline in prices. Ancie is just now no actionary, who is distance. It is enough that this may in insure dency eliber way. The lists are simply stationary, be reduced to an average of from \$16 to \$20 per

WANGS AT TEFF RY OF

CIRCULAR AND CROSS-CUT



PLASTERING TROWELS, ETC.

#### TO SAW MILL DWNERS.

WANTED—Open for an engagement by the first of May.

V. or sooner if desirable, au Engineer of first-class ability, who is also a thorough machinist. Has had 25 years' experience. For last 5 years employed in sew and planning mills and reah, door and blind factory; having charge of engines and sollers, doing my own repairing; making kuices for moulding and other machines. Am also accustomed to the charge of player and sticker hands. Address the office of this paper, 114 Francois Xavier St., Montreal.—Exquerra

JAS. ROBERTSON & CO. Dominion Saw Works

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Manufacturers of Superior Quality Circular Saws, Circular Shingle Saws, Gang Saws, Mill Saws, Butting Saws, Cross Cut Saws.

INSERTED TOOTH SAWS A SPECIALTY. All Saws warranted to be made of Very Best Material, and only First-Class Workmen employed.

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SIMONDS" SAWS



ST. CATHARINES. there is no one grade, in shipping condition, of which an excess on he found, while if recourse he had to partially seasoned stock, no one has more approaching a marketable condition than his own improvement of the condition of the

could not prove as potent in convincing the trade of STLAMBOATING ON THE ST LAWRENCE.

#### 1 Reminiscence of over Mixty Years Ago.

In 1807 Robert Fulton had launched the first steam best in the world on the Hudson. In 1808 John and have resulted in a trade aggregating fully 300,000,000 Henry Winana built a small backer shaped steambent feet more than it did. With a realization of this on Lake Champinin, called the Fermont, which was wrecked near bt. John's in the fall of 1815 November, 1869, the Accountation, built by John Molson, the first strambest ever seen on the at Lavrence, made her trial trip from Mentier' to quebec in 66 hours, including 39 hours' stoppage on the way Sho was het a success, how ver, and next year he built the Matchine, and in 1813 the Saytene, which made her first trip to the become May 4. In 1815 the first Commerce was built by an association of merchants in opposition to Molson, and was, perhaps, a little swifter boat then any of those pre-eding her But in the spring of 1817 John Molson launched the In 1809 the average treight charge on a ton et at ouce became the most popular toat on the river grain between Chicago and the scaboard was \$24. In She once made a trip to Quebec in to hours, which 1870 the average charge on all kinds of merchandise was heralded all over the country, and often beasted was a little less than 38, while grain and meat were of by her commander, Captain Const. He had forcarried much more cheaply, and at times even touched, metly been a licutement in the English navy, and was so low a point as \$3.00 from Chicago to New York, a regular old salt. He was famous for his dieners on and \$2.60 from Chicago to Baltimore. Within the board, which were got up in John Bult style, with last year the rates between Chicago and New York plenty of rosst beef and plum pudding. A passage have varied between \$3 and \$7; from New York to to Queber in the Lady Sherbrooke cost \$2 down and \$10 up All these steambonts were heavy, full-bowed vesnels, altop-rigged, with thush docks, berths below, side-wheels, and low pressure engines of about 45 or over \$12, making about one cent per pound for the 50 horse power. In the passage up from Quobec they whole distance. It is thought that this may in future needed to take every advantage of wind and tide, and needed to take every advantage of wind and tide, and the manner of their being towed up St. Mary's current has been spoken of Such a thing as stemming the rapids above the city was not thought of. In 1818 John D. Ward, an American, a quiet, sover-faced young man, arrived in this city and went to work in siliem that they represent pretty nearly what lumber is worth now, and are content, we are glad to say, to let them alone for a while. In most places lumber may be called pretty firm. The list adopted in this city and being very entermy be called pretty firm. The list adopted in this city, and being very entermy be called pretty firm. The list adopted in this city and went to work in Allison, Turner & Co.'s foundry, and being very entermy be called pretty firm. The list adopted in this city and went to work in Allison, Turner & Co.'s foundry, and being very entermy prising established the next year the "Fagle" found dry for himself. He spent a week in sounding the clinnel above the city, and declared a boat could be built which would go to Laprairie. He got a few controlled to the matter, and a steamboat capitalists interested in the matter, and a steambost was built under his directions, he bimself constructing the engine. One flue afternoon in the summer of 1819 it was announced that the steamboat Montreal would make a trip to Laprairie and back, and a great crowd assembled on the river bank, everyone, even old John Molson, saying she would never make the passage. She started, however, and after two or three hours' watching by the incredulous crowd it was seen that she had passed the "Trois Roche," and reached her destination. It was then said that she would strand on her downward passage, but she arrived safely, and steamboats have run regularly to Laprairie during the summer season ever since.-Mr. Dorwin

#### THE COFFEE DISEASE

The Central American Reporter, published at San Jose de Costa Rica, C.A., under date of November 15, publishes a series of translations of important official socuments concerning the so-called culius disease, of which the following is an extract '-

" It appears that the spot is an affection known in the coffice estates in the state of Santander. There and in the neighboring state of Jaculra in Venezuela is appears in conditions analogous to those soen in Sanaima; that is to say, after a period of heavy rains. Here, and likewise in Cundinamerca, it is already known, by experience, to disappear on the cessation of the excessive humidity, and that the plants attacked recover their health without difficulty, and produce the same as they did before being attacked. Also it is antisfactory to be able to announce that the floresence of the coffee estates of Sasaima, which were attacked by the disease, is exceedingly abundant, and promises an exceptionally productive crop; the fact that the trees which lost their leaves in consequence of the disease have flowered the best, has induced the planters to think of pruning their plantations in order to augment the products. It will also be realised by this that the disease is a benefit, the consequences of which will not be immediately comprehended."

Nicholas Ovorio, who made investigations relative t: the disease amongst the coffee trees which had shown Itself in some parts of 'he State of Cundinsmarca, writes to the Commissioner of Agriculture that about a year and a half ago some of these trees were attacked by the said disease. On some of the trees so affected the truit does not arrive at maturity, and where the fruit matures it is black and dried up. In this fruit appears parasites and spots resembling those on the leaves. The shoots are also of a blackish color, that 7,839 British soldiers could neither read nor the leaves fall off and the tree has the same appearance | write. as agriculturiets call "paloleado," In such cases the crop is small or nose at all; and the trees which are not destroyed give a bad crop the following year. Mr. Carlos Baien inclines to attribute the discuse to the presence of an insect, and it is known that he is occupying himself making experiments to discover if it is so. It is not deuled that the cause of the disease may be what he supposes, but to find a vegetable parasits on the leaves affected appears to be a circumstance extremely worthy of attention because of its probable connection with the cause of the disease. In a later dispatch, Mr. Oscrio states that on making a fresh examination, he was surprised to discover the presence of a live insect. From what he can make out, this insect appears to belong to the class of the "aracut-doe" and to the tribe of t! a "acaridoe." This discovery throws much light on the coffee disease. This meet damages that part of the leaf on which it fixes itself and the fingus is developed afterwards. This discovery is an important fact, as it clearly reveals the cause of the disease, and points out a way to seek the remedy for powerful parasites assisted by the destruction of that part of the plant in which the parasites are discovered in order to avoid contagion.

#### THE INTER-OCEANIC CANAL

Washington, DC, Feb. 8 .- The House Foreign Committee unanimously adopted the report of the sub-committee upon the Crapo resolutions. The report reviews the cutire question, and quotes from numerous authorities. It concludes as follows :---"Your committee, therefore, as an affirmation of the Monroe dectrine, believe that Americans must rule America, and that as a notice to all the world that the United States, cherishing a friendly spirit to all nations, will adhere to strict neutrality in all trans-Atlantic affairs, and expect a like non-interference in all American affairs, whether in the northern or in the southern-western hemisphere, and we commend the

It the right to any European power to interfere with their concerns or control in any other manner their destiny, or transfer to any such power by conquest, cossion, a quisition, or in any other way any of thee-states or any portion thereof, is a measure to which this trovernment is opposed, and which, should the wat attempt be made, it will treat as dangerous to our was page, prosperity, and safety. That the construction in of any public works connecting the waters of the Atlantic and Pacific by any Enropean government of power, whether constructed at Panama or elsewhere, would be a violation of the spirit and letter of the Monroe doctrine, and could not be sanctioned by the Covernment of the United States. That should a canal be constructed across the lettinus of Panaina or elsewhere, this Covermment will insist that it shall not be under the control of any European Government or power, that it shall be tree to the commerce of the world upon equal terms, that no discrimination ever is made against the United States, in peace or in was That the President be requested to take the steps necessary and proper for the abrogation of any exist-ing treatics whose terms are in conflict with this declaration of principles, "

#### WATER POWER AND STEAM

The partial or entire discarding of water power liv a large number of Northern and Mastern manuscturers is one of the industrial restures of the hour. Favorable sites where a fall of water could be accured led to the foundation of the most important of the New England industrial centres, but as time has gone on the power available has been found insufficient in itself and steam manufactories have enrung un in the vicinity. This has been the case at l'aterson, N J. Lowell, and numerous other localities we could enumerate. Manufacturing operations have now at-tained a magnitude that renders absolute dependence on a supply of water subject to the drought of summer or congealing in winter out of the question, being a source of constant loss. Hence steam is everywhere in the ascendant, either as a supplemental or exclusive agent of power. Water power will always be a factor of value, and the Great West still offers magnificent sites to which manufacturers are flocking to undergo the same experience of the more populated Northern and Eastern States Steam, unlike water power, has no assignable limits, and the means of further economising its application are assiduously sought out with its more exclusive use

-The total number of persons who left Irish ports 10 1879 was 47,361, an increase of 5,738 as compared with 1873. With the exception of 299, who belonged to other countries, they were all natives of Ireland The total number of smigrants from Ireland since the iet of May, 1851, is 2,541,670.

-Louisians, at length, has concluded to try the South America experiment of substituting Italian for negro labor in its case and cotton fields. The British steamship Reindia, which arrived in New Orleans from Palermo, recently brought two hundred and ten emigrants from that country. Other laborers of the same class are expected in large numbers during the winter and spring.

-In Germany, including the free cities, about 85 per cent. of the population have incomes under \$300; in Berlin, Hamburg, and Bremen, 14.6 per cent have incomes from \$300 up to \$1,500, and one-fitth of one per cent. (that is to say, about 3,000 persons in the three cities taken together), have incomes exceeding \$15,000 per annum. This does not give one a great idea of the wealth of Germany.

-Of the 946 weavers in Paieley, only 10 are lade under 20, while 69 are 70 years of age and upwards, 192 are between 68 and 70 years; 234 are between 50 and 60, 211 are between 40 and 50, and 128 are between 30 and 40. One other touching fact remains to be stated. Greatly reduced in number though the Paleley weavers are, there are yet too many. A Blath part of the 940 can find an employment.

—On the 1st of January, of a total of 183,042 non-commissioned officers and men in the British army, 122,793 were English, 14,450 Nootch, 38,375 Irisk, 1,869 were born in India or the colonies, 2,361 were foreigners, and 4,094 were returned as "not reported." As regards religious denominations, it appears that of the total of 183,942 officers and men, 115,266 were members of the Churck of England, 14,024 Presbyterians, 7,309 other Protestants, 42,241 Roman Catholics, 152 Mobammedans, Bindoos, Jews, etc., while the religious of 4,830 are not reported; possibly these latter were agnostics. One imperient not is,

-While the area of land under general cultivation in Great Britain has increased during the past ten years 1,694,000 acres, that in wheak has decreased 591,000. Horned cattle have increased a little in numbers; sheep have decreased nearly one million and lambs mere than half a million, owing to various diseases of the past year, and weak condition of the ewes during the season of parturition and suckling. Pigs have decreased in the two past years 482,000. In Ireland the changes are about the same general per-centage as in the United Kingdom; but during the past year there is a decrease of nearly half a million in shoep, and during the past ten years a decrease of 610,000 pigs.

-Last week 52 children died in Brooklyn et diphtheria. Sad reports of similar mortality come from other quarters. It is our duty to call attention of American physicians to the extraordinary success which is now reported in Germany, in this disease, trom the muriate of pilocarpin. It is given in ordinary doses, internally, and a large number of cases have been reported by different physicians wherein the results were astonishingly good. As soon as the pilresults were actouishingly good. As soon as the pil-ocarpin exercises its specific effect on the salivary glands, the false membrane detaches, the inflammatory phenomena disappear, and improvement begins. We particularly request our readers to try this treatment, and report their results, whether good or had,—Medical and Surgical Reporter.

-The production of white lead has given rise to various processes of manufacture, one of the most recent of the alleged improvements in this line being as follows: Very fine ground litharge is subjected in a mixing vessel, to a salt brine, by the action of which chloride or lead and caustic soda are produced. This mass is then run into an iron vessel, into which carbonic acid is pumped, causing a further chemical change in the production of carbonate of lead and common salt ence more, and the latter, being washed 

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#### THE METAL TRADE.

with the first state of the first state of the new year first and the first state of the that they were but in the year closed for in the opening year desingulated in singularies for heavy a military for a state of a containing the containing and a containing a containing a special indication. The stom and done is all market demand in 1841 alectably toilders are well on and it sir groupe to are and alighbilders to well on and their groups there wood, and the stollars have most of them a fair apply of work has been groups to cannot be grouped to cannot be grouped to cannot he grouped to come desprished the fair to come the property of the fair as yet known to ching the insolvers world from Bailey & Dixon and at that as to some of the steel will orders that British wron he e weeped, it would have been far enter for the man in if they had not a complete them. His not for work at any price is a disease which in the steel rail trule this failure will tend to mitigate, jet ealy total. Resummediating will continue even as it has continued all the reserved long as large inquires are superported from it e United States. The test item of news this week from South Water in that the Great Western Railway Company have distributed an order there for 22,000 tons of steel rails. The Dowlate Company have secured 12,000 tons, the Ethw Vale 5000 tonk and the Blackavon Company " or tone In other respects business does not show much alteration. That are I rails have not altogether closed the market against appel inon ralls is illustrated in that the Cylarthia works where there are no steel appliances at all, a good trade is being carried on. The weight of manufactured from and steel sent from Cardiff last week was 2004 tone, and from Newport (110m) 1,761 force.

The quarterly meeting of the Tin Plate Makers Association was held in Birmingham on Wednesday. There was an influential attendance, the Bouth Wales district being especially well represented. The committee appointed to consider the proposed reduction of make, to meet the alleged present over-production, announced that they had anjourned their deliberations to a general meeting of the trade to be called to deal with the difficulty. It was resolved to urge upon the trade the importance for manufacturers furnishing statistics as to their capacity for production, in accord ance with the circular leaved by the chairman on December 1, the meeting unanimously agreeing that this was absolutely necessary to enable them to eletermine the over-production question. The associa-tion resolved to leave each maker free for the present to act independently with respect to the price of tin

The Glasgow pig from market has been characterseed this week by a fairly extensive business in anecial trands for the Continent, and some tolerable orders have also been placed for America. Second hand lots are now held for close upon makers' prices. Cart-sherrie is the brand which is in most request for the states. The prices realized during the week have been scarcely so satisfactory as a week ago, since the heavy and rapidly increasing stocks art as a dead weight at a time when the production is maintained at a high rate. Of course some allowance must be made for the partial stoppage of consumption and export during the holidays. Makers have put up prices between 6d and 1s per ton. At Glasgow yeaterday afternoon business was done in warrants at 53e 6d prompt, a rise of 2d per ton upon the Friday pre-VIOUS.

The bar trade is less satisfactory than any other leading branch of finished from except from raits. It is calculated that the total production of from during last year will, when the official returns are issued, be shows to have been \$15,000 tons, or an increase of about 100,000 tons over 1879. The quantity of steel rails, etc., is estimated at 144,000 tens.

Much interest is taken hore in the progress of the Thomas-Utilchrist dephosphorization process, whether in Europe or America The most recent information obtainable shows that it has been in continuous operation at the Eston Works of Messre Bolckow, Vaughan & Co., at Middlesbrough, since the 18th eletoter last. Two 15-ton converters were put up on the day mentioned, and they have been working day and night over since with every success, commercially as well as scientifically. Them tall is taken direct from the blast furnace, and is used without remeiting. The pig employed contains about 1.5 per ent, of phosphorus and 1.2 per cent, of silicon, and is made from Cleveland stone without any admixture. The steel contains an average of about .05 or .06 per cent, of phosphorus, and about 40 per cent, of carbon The basic lining material is manufactured by Mesers. Bolckow themselves, and so satisfied are they with the working of the process that, s i informed you some little time ago, they are erecting two more converters of large capacity, at their Eaton Works, which, it is hoped, will be started in about two months' time. Beyond this, seven other English steel making firms have taken licenses, and the erection of several special works is in contemplation for carrying on the dephospherisation process with the new and appropriate plant of machinery. With regard to the pro-gress the process is making abroad, it may be observed that in Belgium there are now four converters at work, with excellent results, while one large new work is in course of erection for the process, and two more are in contemplation. In Germany the process is being stewilly carried on at Horde, Ruhrort, Aiz-la-Chapelle, Kaiserlautern, and other places. The Horde Company have erected new and special works for the Thomas-Gilchrist process, which it is hoped will be started in a month or so. Messes. DeWendel and Mesera Stumm have also erected new works which will be started on the process early in the spring. It is satisfactory to note that the Appeal Division of the Imperial German Patent Court has just re-affirmed the validity of the Thomas patents in Germany, on appeal. In Austria the process is being continuously carried on at Rothschild's Works in Moravia, also at Teplitz and Klodno, in Bohemia, while other firms are making arrangements for adopting it. At Creusot the process continues to be carried on, both in the Bessemer and Simens steel works, with success. Licenses have also been taken by the proprietors of five other leading French works At Longwy and at Jolaf new works for carrying on the process upon an extensive scale are approaching Russian firms. Touching the progress of the process in America, the information which is vouchasfed to ironma ters on this side is that new converters are in modified so as to meet the requirements of the new American indifference, and It indications point to a spring before our railways will be able to take up open this year, but "probabilities" all indicate that process. But the most interesting item to English long season of activity and properly.

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The following were the closing prices in the Lone

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#### UNITED STATES MARKETS

#### (American Manufacturer.) Plitsburgh.

Pig Iron-Averaging the reports of the various commission merchants visited the amount of business foing is about fair, and prices of certain kinds of iron have advanced a little. There appears to be more activity in good strong neutral iron, inclined to redbortness, than in any other kind, which has sold as high as \$24, 4 mos, an advance of a dollar within a week. Bessemer fron comes next, which fetches \$28.50, i mos., for good No. 1. There is not much activity in ordinary irons. Cold-abort is worth from \$21.50@\$27, and neutral \$22.50@\$23, extra neutral selling, as already stated, at as high as \$24, 4 mos Cinder-mixed red-abort is wort \$25, all-ore \$26/627, and Besserver \$28@28.50. There is a very liberal consumption of foundry iron, especially by the machine shops, yet but comperatively little passes through the hands of commission merchants. A large proportion of the machine work is done for rolling mills and blast turnaces, and these in many cases pay in pig iron instead of greenbacks; many of the rolling mill owners being interested in blast furnaces. This kind of iron is comparatively low in price, and may be quoted at \$23%24 50 for No. 1. As to charcoal iron, this is no linker a very large market, other kinds having taken its place for many purposes. At any rate, it would be costly to bring it here at present, owing to the auspension of river navigation. It may still be quoted as follows: Missouri and Lake Superior warm-blast charcoal, \$35; Hanging Rock cold-blast charcoal, \$42@45; Hanging Rock charcoal foundry, \$29/232, as to quality-all four months' time.

Manufactured Iron-There is no change to report in respect of finished iron. We quote as heretofore Bar, 225; sheet, No. 24, 4/44.1, tank, 3 1/2/32-

Nails—Are unchanged at \$2.85 for 10d to 60d, least per cent for cash, with an abatement of 10 cents per keg in lots of 150 kegs.

Wrought Pipe—There are no changes to report in pipes or tubes. Discounts and prices remain as fol-lows: Gas and steam pipe, 65'4672 per cent; boiler tubes, 40 per cent; oll-well tubing, 22 cents net; ollwell casing, 72 cents not.

Rails-Steel rails are worth from \$00 frot at mill for delivery throughout the year. No new orders have been placed here during the week, but we heard of a sale of 1,000 or 2,000 tons in Troy, N.Y., at \$62 at mill Light fron ralls are worth from \$48 to \$50 per ton.

Railway Supplice-Spikes, 23 cents per pound splice bara, 2.25 cents, track tolta, 31 cents-all 30 days.

otecl-Trade is moving along about as for some time past. There would perhaps be more activity if the weather was not so severe. For example, we heard of a lot of steel that was shipped for Detroit nineteen days ago, and yet it has not reached its destination, it having been delayed by snow along the line of the Lake Shere road. Prices are about the mms, and we repeat quotations: Best quality refined cast steel, 11/2/2 cents per pound, as to quantity pur-chased; crucible machinery steel, about 7 cents, and Bessemer and open hearth do, at 5@5] cents; Bessemer and open-hearth spring 4/44} cents, and do. plow 41 G41 cente

Old Rails-May be quoted same as last woek Toos, \$31@31.60, and double-heads, \$32@32 60. Borap Iron-No change. No. 1 wrought, \$26@27 per net ton, and railway machinery scrap \$280029. Old car wheels, \$280030 per gross ton.

Copper-lugot, 194 6 151 conts per pound. Manufactured unchanged, except bottoms, which are lower Lead-Pig, 5005 cents per pound. Manufactured unchanged

### l'hliadelphia.

The plethers of money at all the financial and ommercial centros continuos to be felt in industrial channels. The question how is, not where can money be had, but what shall be done with money. Clearing House returns for past week show a decline completion. The process is now being worked in in the volume of business of six million dollars. This Poland, and will shortly be milopted by some other week some four million dollars are paid out as interest on the funded loon of 1881. The dividends on investments in almost all channels are very satisfactory. Confidence in the future was never stronger, rourse of erection for specially working the pro. and, so far as can be seen, with justice. The general cess there, and that those will have the capacity for situation is good. "reulation, except in stocks, and an autput of 200,000 tons per annum. Some existing that limited, is nowhere to be seen. The masses of an output of 200,000 tone per annum. Some existing that limited, is nowhere to be seen. The masses of double heads. The supply is still large, but in view tweet upper lake ports and Proscott. It is impossed works in America, we are informed, are also being the people are earning and spending with accustomed of the probability that it will be unusually late in the say yet to even guess at the time when navigation will be able to take the say of the probability that it will be unusually late in the

bility of the Lenerger Associate a purchasing the coing to produce the latter of the last four or five mills which have no puddling works.

Aberlar, ranger Asia is sing the general produced weeks. The demand for pig from has shown signs of These is no burnious of the pig from the pig weeks. The dimentiful pig it on has shown signs of the pig it on his shown signs of the pig it on his shown in the pig it of the three lots of very firm cruis are reported at \$26. Rails. Mill agents and sellers generally contract three lots of very firm cruis are reported at \$26. Rails. Mill agents and sellers generally contract three cruis state they would find an difference of lanes or less extensive inquiry for steel. ficulty whatever in placing their year's product at itionin transactions of importance are reported also present prices. There are others who would be glad; and the market seems fairly strong on the basic of to do so but have not the experimenty. The most \$ 0 at mill for American, and \$50 at 2 here for fo notable feature this week in pig icen is the very leight. Irons do not appear to be doing so well at marked advance in No. 26 under. A year ago No. 1 sold at \$30 and No. 2 at \$20. The heavy importation foreign make it next to impossible to secure measure of the dish teach harmonic and a secure measure of the dish teach harmonic and a secure measure of the dish teach harmonic and a secure measure of the dish teach harmonic and a secure measure of the dish teach harmonic and the secure measure of the secure measure of the dish teach harmonic and the secure measure of the secure mea of English from however, caused a severe competition | than \$40 for houry section American, with No 1 and in consequence there was a decline. Handactured from—There is a fair trustness in which made a difference of from \$4 to \$5. The diameter appearance of English stocks and the advance of isaliway supplies are ruling fairly atrong under the price has caused No 2 to regain its former position demand, but on other goods the market cannot to price has caused. No 2 to regain its former position demand, but on other goods the market cannot than ditionow firmly held at \$23 by best makers. We formed better than steady find other holders still selling small lots of No 2 at Tin-Several speculative holders of plg metal have \$21 and \$22. One firm retused \$23 for forward declosed out during the week, and, with supply here. Itsery. Gray torge is in stronger demand. Eales mostly in strong hands, prices favor sellers. Upon. have been made so low as \$18 at furnace, but for best tions are 201c spot for Straits, 201c for Ametralian forge from buyers have not objected to \$19.50, while 201c for Billiton, 20c for English L. & F; 201c to other special trands are sold out of the market at \$20 English refined, 23c for Banca. Tin plate moves of and \$21. A few lots of cold-short gray forge Lebigh very slowly, and under the influence of large went at \$18.50. The weather has held back considerable between and heavy production abroad, prices and erable business. Blooms-Charcoel blast sell at \$65. A number of

but not delivered yet.

Pheet Iron-A larger amount of business was transacted by our sheet fron mills during January than during any one month for several years. Orders are plenty and prices satisfactory. Stocks got very low in hands of desiers, and they are now securing themselves. A great deal of new work is constantly coming up. Quotations are as follows:

No 25 to 25 w. g	41	419
No. 22 to 25 w. g		476
No. 15 to 21 W. E.	1044 4 7 74	• •
Best charcoal, 26 to 29 P. R.		Ι.
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Best charcoal " "	· · · · · · · · · · · · · · · · · · ·	6 j (

All net cash prices wholesale, retail prices ic additional on all the above. Railway Supplies-The unprecedented activity in

ali establiabments engaged in supplying material for rallways continues. In many cases deliveries are to rallways continues. In many cases deliveries are to the lowest prices. Silesian sold to the extent of it he made in April of large supplies and the makers are tone at 53c, and closes with 54 asked

being driven to meet the requirements.

Iron Ralls—There are rumors of pending negotiations, but rail makers are disposed to postpone busi ness until the attitude of the market in old maierial is more friendly. The wants of railroad builders exceed any former period, and holders of old rails seem to be aware of this fact. We traced two small transactions, one of 2,000 tons and one of 1,000 tons, this week, but were not favored with terms, deliverles or buyers' names.

Steel Rails-Quotations continue \$71 inside to \$65 outside, with unauthenticated rumors of contracts placed in American mails. Manufacturers are disposed to withhold all particulars. There are buyers on the market, however, for various sized lots, and a good deal of business is going abroad for want of

capacity. Old Ralla-There has been a slight decline Doubles sold this week at \$30 and toes \$28 50. Orders are floating around, offering to deliver at \$29.50 in New York, but caution has the better of the buyers, and as far as known none of these offers have been accepted. To-day a sale took place of 500 tons at \$28.50, and the seller stated he could not sell another 500 on the same terms. The market seems to be weakening because buyers are not in such a need as to compel them to buy immediately. Lots are held at \$23.75 store. It cost \$29.30 to deliver from abroad. There are offers known at \$25 for tees, but no sellers.

Scrap-Scrap is scarce. It cannot be collected or delivered. Heavy scrap for forge purposes brings \$31. Some lote are held at \$32; short scrap sells at \$30, machinery, \$21 offered, but held at \$23.40, atavo plate, \$18; old wrought, \$31 a-ked. A buyer offered \$29.50 for 120 tons. An order for 1,000 tons old axles is on the market.

Tin-Banca, 240, Straits, 201c. Australian, 2010; Roglish, 2010; market opened active.

Pig Iron-American It is represented that some of the furnace companies are withdrawing all options on both foundry and forge fron, at present prices This action has some weight as confirmatory of recent reports relative to the moderate amounts unsold, available for prompt or near future delivery, from the prominent makers, but to all appearances it has no inaterial effect upon the general market. From one source or another consumers seem to secure all necessary material, without a great deal of shopping around, at prices that have ruled current during the month, and, with the supply thus fully adequate for current wants, sellers have not been able to do more than merely talk higher prices. As a whole, the market can fairly be termed firm on the popular brands, and steady on those not so much in fa for, with the range of \$256226 for No. 1 foundry, \$22@23 for No. 2 X foundry, and \$21@22 for gra forge, representing sellers' views. The volume of business is fair, but orders rarely call for more lian 300 to 500 tons at a time. It is said that the product of the Sheridan Furnace has to a considerable extent been contracted for at the basis of \$27 for No. 1 X foundry This, however, is a "special" brand and the price no criterion to the general market.

Scotch-All brands are ruling quite steady at the range of prices ruling current during the past fort-night. All things considered, the volume of business is very fair, though it does not appear that any extensive amounts of stock are changing bands. Hore prices are about \$22@22.50 for Eglinton, \$23@23.50 for Glengarnock, \$23.50/624 for Gartsberrie, and \$24.50 for Coltnoss

English-For the best brands of Middlesboro there is some call, but the interior kinds are neglected. No. 1 is held at 2^ and No. 3 at \$18.50 1219. Heacemer remains quite firm at \$27 for prime makes. though rather quiet.

Old Rails-Nearly all holders are firmly insisting upon last week's prices—my \$29 for T's and \$30 for double heads. The supply is still large, but in view

Fig. In n-Am ther whose storm has arrived, threat- force the payment of current prices at least by their

lie

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sopply bere and heavy production abroad, prices are uncertain. Quotations are as follows: I. C charcost third cross assortment, \$5.75.65.873 for Allews Blooms—Charcoal blast sell at \$65. A number of third cross assertment, \$5.75%5.879 for Allaway small sales were made. The forges, although all grade, and \$6.129466.25 for Melyn grade, coke tin average, are able to accommodate new customers. Staff@3.09 for B. V. grade, and \$5.12965.25 for Yapitty Antitracite are delivered at \$55. Sunken scrap at grade, charcoal terms at \$5.12965.25 for 142.0 Allaway grade; and \$11.20 for 20228 do, and coke terms at \$2.5965. Staff for 142.0 Glais grade, and \$10 for 20218 all round lots

Copper-floiders of Lake Superior ingot are first instating upon 103 cents cash, but buyers seem to take only small quantities. M sufactured quoted as tollows Brazlers' copper, over 10 oz, per aquare ft 280; do. 12 oz. to 10 oz., 30c., do. 10 oz. to 12 oz. 320; do lighter than 10 oz., 31c; circles, segment and pattern sheets less than 84 in. diameter, ste, do do over 84 in , 34c · locomotive fire-box sheets, sic sheeting copper over 12 oz. per sq. ft., 20c, do. boti 28c; copper bottoms, 31c.

Lead-Domestic pig has ruled very firm at 5 % common and 6 to fer retired, though without impotant movement. Manufactured lead quoted as for lows Bar, 6c. pipe 6jc; sheet, 7c—less 10 per cent discount to the trade—and tin-lined pipe 15c. 8b4 74c for drop, 84c for buck, and 84c for patent chilled less I per cent discount to the trade for small lotand for large lots 4 per cent.

Spelter-Domestic is stronger, and \$3% 530 are now

Antimoay-Small parcels are selling at about ... @15% according to brands

-A gang of masked robbers cutered the other. the South Chicago Steel Works, about seven of the on the evening of the 23rd ult., bound and cogged tiwatchman, Brooks, then drilled and blew open th safe, securing \$10,000 in cash, and took their departure, leaving Brooks in his uncomfortable predicament. His cries and growns were heard by proper returning from church, when he was released and the robbery inade known to the police.

-The following table shows the avenue pine Scotch plg fron, Lorb Glasgow, for each year from 1846 to 183), inclusive, excepting for the years 181-1850, 1858, 1859, 1861 and 1860 —

TOOK TOOK	, 1000,	TGOT MERCE	1901.		
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1847	. 65 4	15.2	(2.19	1471	
1843	. 44 4	1403	55 9	1674	i.
1547 1848 1851 1862		1861 .	67 3	1875	<b>∦</b> (3
1862	41 5		61 9	i inte	ġs,
1853	615	1966	. 60 6	1022	34 4
1853 1854	79 9	1 1607		liáte	in i
1855		V4		1879	
1857		1870	11 4	1980	j.
inte .	ALA	1 1971	4 1	1	-

-Polished atccl may be beautifully gilded by mose of the ethercal solution of gold. Dissolve pur gold in aquia regia, evaporate gently to drynes, so as t drive off the superfluous acid, re-dissolve in water, and add three times its bulk of sulphuric ether. Allow ustand for twenty-four hours in a stoppered bottle, as the ethercal solution of gold will float at top Polished steel dipped in this is at once beautifully gilded, as by tracing patterns on the surface of the metal will any kind of varnish, beautiful devices in plain meta and gift will be produced. For other metals the electro process is best.

-A smelter's ton of copper ore is 21 cut, and weighs 2,352 pounds, the manufactured copper beit; sold at 2,240 pounds to the ton. Coke for a runor fire is bought 2,000 pounds to the ton. A ton of a fron for a forge is 2,268 pounds, blooms being sold a 2,464 pounds to the ton, and 2,700 pounds constituting a ton of retined metal. Coals on this continue are bought at 2,240 pounds to the ton, and retailed # 2,000 pounds to the ton in England, they are always bought and sold at 2,240 pounds, except at Newcastle where they are shipped by the chaldron of 30 cwt. 3,380 pounds, and Newcastle coals are to-lay so bought and sold in Quebec, Canada.

### VESSEL FREIGHT NOTES.

Although navigation will not open for some us yet, business is already being done as to the regula tion of freight rates. It is considered certain by the who ought to know, that all kinds of freights will better for vessel men this year. Timber freights from the upper lakes will be 35 per cent, better than be year. Coarse treights are offering in such quantities that rates will be sure to be higher than last reason. Lumber freights, it is judged, will be 20 per cent higher than they were during the greater part of two year at least. And it is thought that grain freight will open higher than they did last spring. Charten have already been made to carry fourteen cargo oak timber from Canadian ports on Lake Lite! Kingston at \$37.50 per 1,000 cubic feet, and or charter at \$30 per 1,000. Charters have been made to carry oak timber from Bay city to Kingston at \$1. per thousand, and it is reported that another charte has been made at \$135. Vessel owners are asking \$160 per 1,000 on wancy plus from Jake Superior, b no charter is reported at that rate. Generally vew-overywhere are being overhauled. There will be of Lake Ontario again this summer the tugs if T Ro and S. S. Edsall. The Edsall was purchased fast yes by Capt. Murray, of St. Catharines, and is now in di dock at St. Catharines being rebuilt. She will & into the timber towing business on Lake Untario le

SONG OF THE SCIENCES

200L061

the merry is the Madrey ere that sits best to sea, the cheery little formline hath many charms tor me; if he the fine fehire dormant arrest green, and grey, it standed roughly flow their arms impulsively away then burg mer becathe miss score and let me see the conferent the little Koophite like sanden floweret duction.

We litrke the fair Anemone from office rocks scat, such tondeteliar bassail when fried life and to eat, to see the from Sea Commission lesson well may who, they faithely take their organs out and then put fresh on

in the combined constraints surely bear the belt, the Detail and the detail that fluxery knows well

1. 12 so heard of the Octopus, 'ties advanced thing to know, lie has a ganglion makes him blusts, not red, but white as some

And why the strange Cercaria, to so a long way back, we are ever, as some lodies do, a fablichable "suc i" and Loake And I we the Franc has parasites that on his lies i toake Ask Dr Cobbell and be lies; they to just like they soles

from study will root gry, and add unto pony store, fire tales of Biogenes's and Prote stannic fore; its Paley neatly has observed, when into his they burst, the free and the philosopher are just the same at first that what's the origin of life remains a puzzle still, int Twishil, Jackel, Hastian go wrangle as they will,

#### FRANKLINS MAXIMS.

Litchen fire

Difference is the mother of good luck.

Pride breakfasted with plenty, dined with poverty.

and support with infamy. Extravagance and improvidence end at the prison

It is easier to build two chimneys than to keep one

ambild. He that goes a borrowing returns sorrowing Rather go to bed supperless than rise in debt

Sieth, like rust, consumes faster than labor wears A life of leisure and a life of laciness are two differat things

Creditors have better memories than debtors. The rolling atone gathers no moss

If you would have your business well done, go, if

It is foolish to lay out money in the shape of repentance

#### COLD FEET.

It is, as we have often labored to show, a mistake It is, as we have often labored to show, a mistake to suppose there is any warmth in clothes. Animal heat is the direct result of changes going on within the body itself. Nutrition by food, and the discharge of energy by exercise, are the efficient causes of heat. Clothes "seem" to warm because they prevent the cold air and objects with a capacity for heat which surround the body from attracting the heat generated within its organism. The clothing is simply an insulator. It follows that it should be light in weight, and above all things that it should permit the free and full circulation of blood through every part of the system—to the end of every finger and toe—and that system—to the end of every finger and toe-and that system—to the end of every unger and toe—and that the muscular apparatus of the extremities should be in perfect working order. If we will wear foot cover-ings, whether boots or stockings, which compress the feet and render the separate action of each too impossible, it is simply aband to expect to be warm-footed least is the complement of work and nutrition; and if a part of the organism is so bound that it cannot work, and its supply of blood is limited, it must be cold. The resort to stouter and heavier clothing mades such also meaned is aimply videnious. under such circumstances is simply ridiculous. Generally it is the stockings that compress the fest. The garter acts as a lighture, and diminishes the blood supply, while the stocking itself acts as a bandage, and impedes the circulation through the extremities .- Lancet.

There were received in Boston, during the year 1880, 351,744,000 feet of lumber in all. Of this quantity about 289,400,000 feet was received by rail, 41,—The

ried during the year ending June 30, 1980; 7,800,000 postal cards, and 4,301,118 pounds of newspapers posted from office of publication, with 7,870,000 newsspecial from once of publication, with the total of sapers posted from other sources. There was added furing the year 1,013 miles of new post routs. The delivery system of letters is operating in eight cities, which 103 men are engaged, and by whom in one year 16,442,336 letters and newspapers were delivered. The letters sent to the dead letter office numbered

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-An interesting instance of how one transcentinental railway has diverted transportation is that of the shipment of 330,000 cards of slikworm eggs, worth the support of 3300 tation to Italy, via San Francisco, Sew York and Havre, France. They were bought by Italian dealers in the eggs, who started from Yoko-bains Nov. 26, from San Francisco Dec 14, and from New York Dec. 22, and have probably arrived at Havre by this time 'There are about 30,000 eggs to a card, and the cards are packed in boxes resembling tea chests, each of which contains 1,300 cards. They will te kept in the mountains, when they reach Italy, till liar to a recluse. about the end of May, and then will be sold to persons who take the worms.

-Pic first Englishman known to have been a bell bunder by trade lived in 1284, when he made four hells for the cathedral church of Exeter, none of which remain, and one which is dated 1296 is the most anremain, and one which is dated 12:00 is the most still of whom 3,000 are women, 500 young griss employed cient identified in England. A very old bell is still of whom 3,000 are women, 500 young griss employed cient identified in England. A very old bell is still in wearing the wood, and 500 men who wash tanging in the steeple of Cold Ashiby church, which in wearing the wood. The average of the wages is tears the date of 1317. In Leicestershire, 140 of the and dye the wool. The average of the wages is early period have been found, so that there is only a about 94 cents a week, and each woman weaves in the difference of three old bells between the two counties. Northamptonshire does not seem to have boasted of a bell-founder till the end of the sixteenth century, being thus about one hundred years later than Leices Many of the Northamptonshire bells were made by Newcombe, of Leicester, the two which hang teside "Maria," at Cold Ashby, being by him, with the inscription, "Newcombe," of Leicester, made me, of the 110,000 yards exported going to England, and a mility that ensures their success.

We also y interested in the ensures their success.

We also y interested in the ensures their success.

We also y interested in the ensures their success.

We also y interested in the ensures their success.

We also y interested in the ensures their success.

In the ensures their success.

#### BIGDOING THE NIAGARA.

A special despetch to the Buffelo Commercial from A special despetch to the Buffalo Commerced from Washington says —The following is the bill introduced by Mr Crowley to authorize the construction and modutenance of a railway bridge across the Niasara river "Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. (1) That any bridge and its appartenances which shall be constructed and the states of the Construction o structed across the Negara river at or near the village or town of Tongwanda, N Y, to Canada, in presence of the provisions of an act or the Legislature of the the programs of an act of the legislate of the both of New York, entitled. An Act to heceporate the Niceam front Island Bridge Company, passed May 22nd, 1874, or of any act or acts of aid legislature now in force amending the same, shall be lawful attructures and shall be so held and taken, and are by her authorized to be constructed, and maintained hereby authorized to be constructed and maintained as provided by said act and such amendments thereto, anvilling in any law or laws of the United States to the contrary notwithstanding. And such bridge shall be and is hereby declared to be an established post road for the mails of the United States. But this act shall not be construct to authorize the construction of any bridges which shall not permit the free navigation of said river to sub-santially the same extent as would be enjoyed under the provisions of said act and the amendments thereto heretofore enacted and now in force. Provided, nevertheless, that the location of any bridge the construction of which In hereby authorized shall be north of the present International bridge across the Niagam river, and Flough deep white sluggards sleep, and you shall have two draws, one over the main channel on the base corn to sell and keep

Pride is loud as want, and a great deal more savey. Sitks and satins, scarlets and velvets, put out the land, to be no constructed as not materially to longer the main channel on the rast side of Grand. Island, and the other west side of Grand. to impede the navigation thereof; and the piers o said bridge shall be parallel to the current of said river. (2) That the bridge herein named shall be subject in its construction to the supervision of the Secretary of War of the United States, in whose office copies of the plans and specifications relative to its construction shall be filed; and all railway companies desiring to use the said bridge shall have, and be en-If you would know the value of money, go and try titled to, equal rights and privileges in the passage of borrow some.

What maintains one vice would bring up two thereof, and of all the approaches thereto, under and upon such terms and conditions as are prescribed by upon such terms and conditions as are prescribed by chapter 550 of the laws of 1874 of the State of New York, entitled An Act to incorporate the Niagara Grand Island Bridge Company." The Commercial to-day says.—"The papers in the suit of the Canada Southern Railway against the International Bridge Company, to compel a modification in the charge for crossing the bridge, are still in the hands of Judge Wallace of the United States District Court, awaiting bis decision. It is expected that the new bridge across the Niagara river at Tonawanda for the Canada Southern Railroad will be commenced in the spring. Southern Railroad will be commenced in the spring. The reasons for building this bridge are that the in-ternational bridge is inadequate to accommedate all the traffic moving over it, the yards at Black Rock are too ama'l, and the tolla charged by the International Bridge Company are excessive. When the bridge is completed there will be a double track road from Buffals to Tonawanda, and the freight yards will be established at the latter place"

> An extensive gold and fron mining property in Madeo has been sold to Americans for \$200,000.

-Mr Benjamin Jefferis, traveller for Doulton & Co, sanitary pottery, Lambeth, London, England, has receasly written to an old colleague of his in Toronto, asking the prices and other particulars of Canadiso stoves most suitable for warming rooms in England The stoves must be suitable for consuming coal, wood or oll.

-A number of the monied men of Montreal have in contemplation the construction of an inclined rail-way up the mountain similar to the Cincinnati inclined toad They intend to purchase areas of land which they will convert into building lots. The cars will be run by a stationary engine, either at the top or bottom of the incline.

-The very elegant dress worn by Lady Macdonald a: the Junior Conservative ball, held in Montreal last week, excited universal admiration among the ladica who were surprised to learn that the fabric was the production of a Canadian loom, having been made by the Corrivosu Silk Mills, at Montreal. The material was a richly brocaded satin, in three

-The following vessels entered inward from sea at 000,000 by sailing vessels from the south, 1,500,000 by the port of Montreal for the year ending 30th June, southern steamers, and about 100,000,000 by water from Maine and the British provinces.

The number of post offices in Canada on the let Nov. 1880, was 5,773, and the number of miles of post office route 40,011. There were 48,000,000 letters early office route 40,011. There were 48,00 from sea fisheries, none; total, 276.

> —I're cultivation of pampas grava, now so much used for decorative purposes has become a profitable industry in Southern California. Three quarters of an acre planted with pampas grass has yielded, at two and a half cents a head, five hundred dollars. Another grower sold all he could raise for seven and a half cents a head. Last year ten thousand heads or plumes of this grass were sold from that region.

-Rattray's Cigar Factory, Montreal, posse character." Sophia Larose is 73 years old and had been employed in the "stripping room" of the estab-lishment for over 60 years. During that time she has never been absent during a single working day, has occupied generally the same seat in the same corner of the room and does the same amount of work she did the day she entered. She was never married, bu states she does not even yet despair of one day being the lives entirely slone, in lodgings provided be by the establishment, and is full of the oddities pecu-

... The revival of the favor in which Turkey carpets were formerly held is bringing fresh prosperity to Anatolia, the so-called Smyrna carpets nearly all of them coming from this province. The best of these carpets are made at Ouchack, by Turkish women. The manufacture occupies on an average 4,000 hands, course of a day's work about ten inches of a carpet two feet broad The town of Ouchack uses in the course of a year about 660 tons of raw wool, which yields about half that weight when spun, and the manufacture of carpets has increased very much of late years total for 1819 having been nearly 115,000 square yards of which only 8,000 yards were sold in the country, half

### POSTAL TIME-TABLES.



## Post Office, Ottawa.

ARRIVAL AND DEPARTURE OF MAILS.

Non-		Ci ve Deliver			
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Fastern-Mont , Que , etc		100	800	× vn	
Maritime Provinces		1100	Į., .	1 60	7 (9
Western-Lines, n. Toronto	10 10	1	N (0)   N (0)	1 ~ ~	7 65
List, via Oxfonebora	10 00	[1∞	3 63	x (r)	7 00
Western U.S. N.Y. through mails	10 60	<b>!</b>	10	300	4 40
Kemptsillo, etc	15 65	liωi	" "	1400	4 40
Manotick .	io	` ``.			4 40
North Gower, Kars	•• ••	100		}	4 40
Motcalfe, Russell, etc	10 10	13.45			4 40
Perabroke, Reafrew	9.50		3)	* 00	2 (0
Ashton, Stitterille, Huntley	14 50	1			288
l'exth, Smith's Fails, etc	9 %	1	3 30	* 00	2 60
Sand Point, Amprior	6 86	t '	3 30	8 00	200
liristol, Clareadon	9 50	2 (40		10 30	* **
Bell's Corners, Richmond	6 60	# 100 I	5 00	F.K.	600
IluII }	10 60	i .	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	2 00	7 30
Aylmer, Eardley, etc	1000	ļ	4.00	200	, .
North Shore & Montreal	4 60	1	1		3 00
Gatineau Route .	6 00	l	l	A.W.	6 00
New Edinburgh .		1	\$ 30	10 30	7 30
Billiogs' Bridge	٥٥.	1	l		2 10
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British, era Halifax, Throly	į	Į	13 00	poon	
British, supplementary	l	i	1 30		, ,

Registered matter must be posted half an hour previously Office hours from 8 a m to 8 p.m. For Savings' Bank and Money Order business, 8 a m. to 4 p.m. G. P. BAKER, Postmaster.

# ·Post Office, Montreal.

MONTREAL, July 5, 1889.

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	DELIT	JAY.	MAILS.	CEOR	140.	١,
-	A.W.	P.N.	ONTARIO A WESTERN PROVINCES.	A.Y.	P.N.	1
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١.		6 15	Ottawa River Route up to	6 00	•	i.
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		5 a5	PROVINCES. Quebec, Three Rivers, Ber-			١.
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ł		12 00	Occidental Ry. Main Line	7 00		١
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١	8 0°.	١.	Acton & Sorel Ry St. Johns, Stanbridge and		8 00	١
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	(We	dnesday	New York for England		2 15	
# T	Track A	dosminy	American Packet to German; )		2 15	
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t B	WAR	e, etc.; ded dall;	repared in New York are for yon New York, whence mail:			
1	For il	despatch Avana a	ied nd West Indies, ein Havana	•	2 15	
	****	ATERIA	day p ts	1	413	_ ;

\*Postal Car Hage open till # 45 a m and 9.15 p.m.

The Street Boxes are visited at # 15 a.m., 12.00, 5.30 and 7.30 p.m.
Registered Letters should be posted 15 minutes before the hour of closing ordinary Malis, and 30 minutes before closing of Haglish Malis.

#### KINGSTON.

#### Kingston Vinegar Works.

The Kingston Vinegar Works, of which Mr. A. Haar is the Proprietor, manufacture

White Wine, Malt, Older & other Vinegars The Vinegars of this establishment have a reputation for

### RAILWAY TIME TABLES.



### Canada Central Railway

CHANGE OF TIES.

On and otter MONDAY, 21st JUNE traces will over the

Proceedings of the process of the second sec

Brockville ... And 103 in office 4.
\*Express Train from the West, leaving Terente at 6 \$1.0 m.

\*Express Train from the west, icaving second of the pin-T. D. a to Express Train from Brockville, Perth, Pembicke, and all Intermediate stations. I to p.m. Frains run on Montreal triac.

\*Them trains wake only four stope between Offices and Brockville Joseph Lettern Offices and Brockville Mith the Utica and Black River R. R. for New York, Albany and all points botth.

ARCHER BALER. ARCHER BALER, Ucceral Manager

T. A. McKINNON, Superintendent, Brockville, Out., 21st June, 1880.



#### ST. LAWRENCE AND OTTAWA RAILWAY.

On and other THURSDAY, 10th JUNE, 1880, trains will run as follows .-

LEAVE OTTAWA. For the East, West, South and South-East 11 15 a.m. For the East 2 00 p.m. For both East and West 10 30 p.m.

For both East and West 10 30 p.m.

ARRIVING IS OFTAWA.

From Noth Rast and West 500 a.m.

From the Fast, South and South-East 400 p.m.

From the West 620 p.m.

From the West are the 11 a.m. train. Ample time for dinner at Prescott Junction.

Fore Connections with Grand Trunk Trains to and from both East and West, and with three of the Rome, Watertown & Ordensburg and Iske Champiain and Utica & Black River Hailway at tegleosburg, to and from New York, Boston, and all points South and East.

A Breamboat Express Train will leave Ottawaon Tuesdays.

Thursdays, Saturdays and Sundays, at R a.m., connecting with the different lines of steamers on the St. Lawrence, for both East and West.

A Hola Car will be run on the Night Trains between Ottawa and Proscott Junction.

Trains are run on O tawa time.

WALTER FHANLY

WALTER SHANLY General Manager, Outaws.

OTTAWA, July 35, 1850.

# Q. M. O. & O. RAILWAY.

CHANCE OF TIME.

COMMENCING on Wednerday, June 23rd, 1860, fraine

-		Mixed.	Mall.	Rapress.
8	Leave Hochelaga for Hull Arrive at Hull Leave Hull for Hochelaga Arrive at Hochelaga	10.30 a.m.	8.30 a.m. 12.40 p.m. 8.20 a.m. 12.30 p.m.	9.25 p ts 8.45 p ts 9.15 p ts
	Leave Hochelags for Quebec Arrive at Quebec Leave Quebec for Hochelaga Arrive at Hochelaga Leave Hochelaga for St.	^.00 p.m2.	6.30 p.zz.	
	Jerme Arrive at St. Jerome Leave St. Jerome for Hoch- clara Atrive at Hochelaga	5.30 p.m. 7.15 p.m.		

[Local trains between Hull and Aylmer.]
Trains leave Mile End Station seven minutes later.

DE Magnificent Palace cars on all passenger trains and slegant sleeping cars on night trains.

Trains to and from Ottawa connect with trains to and from Ottawa.

Quebec.
Sunday trains leave Montreal and Quebec at 4 p.m.
All trains run by Montreal time.

GENERAL OFFICE, 13 Place d'Armes Square.
TICERT OFFICE, 13 Place d'Armes and 22 St. James St..
Montreal, and opposite the St. Louis Hotel, Quebec.
LA. NENKCAL, Georal Superintendent.

### INTERCOLONIAL RAILWAY.

SUMMER ARRANGEMENTS, commencing 18th June, Through Express Passenger Trains run dally fexcept Sun

#### PICTON.

#### TO BREWERS AND MALTSTERS.

The undersigned, having enlarged his retorage capielte, and portion an Elevator, which is the largest and best in the County, is prepared to purchase on Commission, Barley and other arm us for Maltaters and dealers.

Every tacility offered for direct and cheap transport References—Agent, Bank of Montreal, 4: Sinker, M. P. P. M. Och, July 1800.

Picton, Ont., July 31-1, 1880.

#### TO CAPITALISTS.

A SPLENDID SITE FOR A LARGE MALTING ESTABLISHMENT

in the heart of the celebrated Bay of Quinte barley district. A never-failing supply, by gravity, of pure spring water at a temperature of 45° the year round. Also, a splendid site for a WHITE PAPER MANUFACTORY.

water clear and pure, also by gravity. Water and rail com-munication with all parts. For particulars, address W. P. DESPARD, Brewer, Picton, Oat/

#### PETROLEUM.

#### PETROLEUM IN PICTOU COUNTY, N.S.

The Devone a and Silurian formations in Pictou county are like, to yield more than promising indi-cations of petrol-um. Mr. Charles McLellan, of Rockport, Mass, has secured a valuable oll-boaring. and niveral territory near the Pictou coal fields, and has found upon it hubbling springs at different places, the extreme points being sifteen miles apart, oil was found doubley on the surface of water and long very much in the same conditions as petroleum was found and gathered for medicinal purposes in what became the great oil districts of Pennsylvania before Colonel Drake demonstrated by well-sinking the existence of the great reservoirs of oil that existed beneath. Mr. McLellan found in some places on his property an escape of gas resulting from driving a stick into the rand, and from with, when lit, a large flame shot up for some time. This probably extensive oil field it only eight miles from a good sea harbor and within his inites of the railway; there is therefore every advantage for the establishment of renneries and for the shipment of crude oil, a pipe line down the river halley will conduct the oil to shipping chartered for Hamburgh, Bremen, and other European oil refining eutres, and the interest and maintenance of so short a line of iron piping will be an item in the cost of transport too trivial for notice in estimating the -bipping charges as compared with those that lie on Pennsylvanian or Ontario wits. We understand that Mr. McLellan has already had proposals to lease areas for well-sin log .- Mining R even.

The annual review of the United States petroleum production and export business for the year 1880 is hardly antisfactory. The average daily production has increased from 65,000 barrels in 1879 to 67,700 in 1×80, or 12.700 barrels per diem, equal to 23 per cent. At the same time the exports have fallen off over 2,000,000 barrels, or 77,000,000 gallons. The production is thus largely in excess of the demand, but any decided decline in prices during the year has been prevented. The exports from Baltimore in 1880 were only 15,131,979 gallons, against 22,868,928 gallons in 1879, and 37,712,900 gailons in 1878. The exports from Philadelphia fell off from 92,243,108 gallons in 1879 to 64,973,946 gallons in 1889.

#### DANGEROUS THINGS.

In an article on the recent New York boiler explosion, the sarcastic scribbler of the New York Times thus allows his steam to escape: "No caudid person can deny that a sound boller is a dangerous thing. and that the presence of a careful and competent ea gineer is the only thing needed to insure its utilizate explosion. Had that boller of the Westfield been in charge of a small boy instead of a licensed engineer, who knew his bu-iness so well that he testified that in his opinion a 'vacuum' meant 'bad air,' it would never have burst. It we want to put an end to boiler explosions we must abolish the practice of having boilers inspected and tested by the authorities, and we must forbid any able and careful engineer to approach them. Since steam bollers were invented it has herer been shown before any cotoner's jury or any official board that an exploded bol'er was in bad condition, or that it was in charge of an ignorant or careless man. And yet, instead of learning the leason taught by experience, we have gone on using good boilers and employing able engineers, when the infallible remedy of using lad boilers and permitting only the most ignorant and careless persons to have charge of them was within our many teach? of them was within our easy reach."

#### NEW STEEL SHIPS.

The rapid growth of the Transatiantic trade in recent years has rendered necessary for the leading steam times a much larger class of vessels than could have been successfully employed ten or fifteen years ago. To this end a number of iron steamers of the largest class are now in course of construction in the chief shippards in the United Kingdom, in addition to those that have been added to the principal lines between this port and the leading ports of Great Britain. The City of Rome, in process of construction for the Inman line, at Barrow, will be of steel, 600 feet long, and have a carrying capacity of 5,500 tons. Her rival in the Cunard line will be the Servia, now in the course of construction on the Clyde, which will have a carrying capacity of 8,500 tous. It is intended that each of these vessels Champlain & S. hall be able to run 18 knots an hour. The Canard Company is also having three other steamships built, with a length respectively of 400, 450 and 500 feet. The Alian line is to have a new steamship 450 feet long, the Guyon line one 500 feet long, and the other lines are making arrangements for the increasing travel and freight, -N. Y. Shipping Last.

#### PATCHING BOILERS

When a lotter requires patching it is better to out out the defective sheets and rivet in a new one, or, if the tracks of such railways, and the manner of such this cannot be done, a new piece large enough to cover crossings, and the terms and conditions applicable the defect in the old sheet may be riveted over the thereto; also as to the alignment, arrangement, dishole from which the defective portion has been cut position and limitation of tracks within such muniposition and improvements of the builds such out. If this occurs in any portion of the boiler subject to the action of the fire, the lap should be the same as the edges of the boiler scame, and should be carefully calked around the edges after riveting. Whenever blisters occur in a plate, patching is a com-paratively simple thing as against the remains of a plate worn by corrosion. In the latter case the defective portions of the plate should be entirely removed, and the openings should show sound metal all around, and of full thickness. It this cannot be ob- freight, crossing of tracks and componention therefor tained within a reasonable sized opening, then the including cost of maintenance, the alignment, whole plate should be removed. It often occurs that a minor defect is found in a plate, and at a time when of way over and through lands owned or occupied it is not consenient to stop for repairs; in such an by railway companies, running powers; haulage, event a soft patch la often applied. This consists use of tracks, use of stations and station grounds, of a piece of wrought iron carefully fitted to that portion of the builtr plate needing repairs holes are fitted in both plotes and patch, and "jatch boths provided for them. A thick putts consisting of white and red lead, with from borings or filings in them, placed evenly over "he limer surface of the patch which is then tightly bolted to the boiler plate. This is at less but a temporary makeshift, and ought never to be regarded as a permanent repair. A mistake is often made in making a patch of thicker metal than that of the abelt of the koller needing it. A moment's reflection ought to show the absurdity of putting a five-sixteenth or three-eighths jutch on an old one-quarter inch boiler shell; yet it is not so rare an occurrence as one would imagine. A piece of new iron three-sixteenths of an auch thick, will, in most cases, be found to be stronger ach thick, will, in most cases, he found to be stronger.

Six thousand five hundred tons of bay destined for than that portion of a one-quarter inch of a plate needing to limited. States have been taken across the res bridge at Hochelaga since the opening of the season.

#### THE MONEY MARKET. TORONTO STOCK REPORT

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MONTREAL STOCK REPORT.								
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#### RAILWAY COMMISSION.

In the House of Commons on Thursday last Mr McCarthy moved the second reading of his bill for the establishment of a Railway Commission for Canada. The preamble sets forth that disputes frequently arise between municipalities and railway companies respecting the crossing of roads and streets and the location of roads and streets across crossings, and the terms and conditions applicable cipalities; also as to the compensation payable by railway companies for lands taken or occupied by them in which lands such municipalities are interested, or in respect of which they claim compensation, also respecting by-laws passed by municipalities in aid of railways and agreements made in relation thereto, that disputes frequently arise between railway companies themselves as to traffic arrangements, the adjustment of rates for passengers and arrangement, disposition and location of tracks; rights change of freight and other matters relating to powers; bighways and bridges, and traffic arrangements. The bill provides for the appointment of three Commissioners, to be styled "The Italiway Commissioners of Canada," one of whom "shall be of experience in the law," and one of experience in railway business," for the appointment of a "Communications," Registers y and for the allilar of the missioners' Registrar, and for the sitting of the Commissioners at such times and in such places, and for the conduct of their proceedings in such a manner as to them may seem most convenient for the speedy despatch of business. The bill contains forty clauses.

THE RESERVE OF THE PARTY OF THE

#### FEATS IN SKATING

The Dutch are famous skaters. What stilts are to the peasant of the Landes, skates are to the Datchman in the winter. He goes to market on skates he goes to church on skates; he goes love-making on skaton. Unlike the Englishman, with whom skating is a recreation, to him it is a necessity. The stient water courses of the summer mouth are to him highways end byways when the frost acts in Still it is a matter of doubt whether the Dutch equal the English in skating. They are, undo-tedly, to be credited with what is termed "ataying" power, but for celerity and the execution of figure skating, our countrymen are thought to excel. The well known Fen akater "Fish" Smart, with the wind behind him, and over a straight course, would, we suspect, sur-prise the test skaters in the Netherlands, or any other Continental country Some of the fastest time re-cords are marvellous. One is credited with skimming over the ice a mile in 2 minutes and 4 seconds, ano ther with having accomplished a mile and a half in 3 minutes and 6 seconds; a third with even a greater achievement. William Clarke, of Madison, Wisconsin, U,8, is credited with covering a mile in 1 minute and 56 seconds. It must, however, be remembered that no authentic evidence exists as to these performances. The distance may have been guessed at or improperly measured, or the time might have been kept imperfectly. Up to 1878, only one authenticated time is said to be placed beyond doubt. Mr. Sydney Tobbutt travereed a mile, properly measured, in 3 minutes and 15 seconds. Whether Dutchmen can of the Dutch Minister to London and the Engsurprised if those of the English champion are sur- pressure. Others think that the burn generates as passed.

## DOMINION TRADE REGISTER

#### INDUSTRIAL DIRECTORY.

AGRICULTURAL IMPLEMENTS

A. S. WHITE POR MANUFACTURES IN CO., C. 1817.

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COTTON MILLS DUNDAS COTTON MILLS CO., Duclay, Oct =Gr.), in the decount to kings parts, etc.

HAMILION COTTON MILLS CO., Hamilton por noneas at lyanos.

ENGINES AND BOILERS

O C MODERISON, Hi militor - Englison, Leature, a FILES

THOS GRAHAM, Toronto -- Manufacturer and progress, the rate trapes. FURNITURE.

OSHAN A CABINET CO., Oshawa, Ont.—Faronto, M., Inducera foronto branch, "I longe St., M. tr., traich, 417 and 419 Notre Dames t

GLASSWARE.

HAMILION HEASE CO., Hamilton-Manufactus s.

GLOVE MANUFACTURERS.

W. H. STOREL & SON, Action, Out - Manufacturers ; gloves and mitte in overy variety and style

IRON WORKS. IMUN WURKS.

CANADA SCIEW CO. Dandas.—Manufacturere of the and brass screws, bolts and rivets.

DOMINION BOLT CO., 87 St. Peter St., Montreat.—Manufacturers of every description of bolts, hot pressed—prailway spikes, bridge, bolter and from rivets. Works.

Toronto.

Toronto.

IIAMILTON BRIDGE & TOOL, CO., Hamilton.—Iron reway and highway bridges and from working machiner.

McKECHNIE & BERTRAM, Dundas.—Machine too's and wood working machiners.

OSHAWA MALLEANIE IRON CO., Oshawa, Ont.—Machine tron also Co., and Tait pates a rew wrenches.

COWAN & CO., Calt.—Manufacturers of every description wood working machiners.

KHITTING MILLS.

S. LENNARD & SONS, Dundas,—Manufacturers of Elsand tancy hoelery,

LEATHER BELTING.

DOMINION BELT AND HOSE CO., Toronto.—Oak faired belting, face leather, etc.

ORGAN BUILDERS.

BOLTON & SMITH, 167 Mountain St., Montreal.—Tax: and repairing attended to.

S. R. WARREN & SON, Toronto.—Manufacturers of chur.,

PAPER MANUFACTURERS CANADA PAPER CO. (Limited), 376, 376 & 378 St. Paul Montreal - Manufacturers and importers of all kind-papers. Mills at Windsor, Sherbrooks and Porticul

DANIEL BELL & CO., Toronto.—Manufacturers of the "Excelsior" organs. DOMINION PAPER CO., 87 St. Peter St. Montresi. Manufacturers of manilla, look and news print, card board mid-fles and colored papers

JOHN FISHER & SONS, Dundae—Manufacturers of pric-lug and wrapping papers.

WM. BABBER & BROS., Georgetown.—Manufacturers book and fine papers.

SAW MANUFACTURERS.

R. H. SMITH & CO., St. Catharines.—Manufacturers of a kinds of saws, plartering trowels, Shaw knives, etc. & '-manufacturers for the Dorolnion of Canada of the ce's brated "Simond's Naw."

SHURLY & DUTRICH, Galt. Ont.-Manufacturers circular and cross-cut saws, plastering trowels, etc.

SPICES, ETC.

M. D. VAN DE CARR & SON, Toronto, - Manufacture, and importers of coffees, spices, cresin tarter, muster)

STEREOTYPERS, ENGRAVERS, ETC. F. DIVER & CO., Torobio.—Electrotypers and elereotypers. Designers and engravers on wood.

TELEPHONES. IELETHURES,
IIOLT TELEPHONE CO., Teronto. -Telephones sold our
right \$5 to \$50 per pair; wire 5c. to 5c. per rod, notes
two males.

WIRE WORKS.

B. GREBNING & CO., Hamilton, Ont.-Manufacturers wire ropes, clotn and general wire workers. WOODEN GOODS.

C. T. BRANDON & CO., Toronto—Have special facilities and marchinery for the manufacture of all kinds wooden articles. Co. respondence solicited. WOOLLEN MANUFACTURERS.

J. FOUTH & CO., Cobourg.-Woollen Manufacturers JOHN WARDLAW, Calt. Ont.-Manufacturer of Sec-ungering, wheeling and knitting yarns.

WOOLS AND COTTON WARPS. WINANS & CO., Toronto. - Dealers in wools and ect: warps.



-Mr. 3. C. Walker, statistician of the New York Produce Exchange, states that during the year 1874 about 6,000,000 head of cattle, 12,035,361 lbs. of bacus and hams, 5,051,278 lbs. of lard, 3,957 barrels pork, 2,430,098 lbs. of cheese, 1,501,027 lbs. of tallow and 2,816 barrels of beet were carried over the rail roads from the west for export purposec. He states further that since July, 1879, 127,000,000 bushels of whoat have been exported from America to Europe and that there was still an available surplus about 60,000,000 bushels for export, on January 1-1 1890.

-All kinds of burns, including scalds and san burns, are almost immediately relieved by the appl cation of a solution of soda to the burnt surface must be remembered that dry sola will not do unless it is surrounded with a cloth most enough to dissolve This method of sprinkling it on and covering with a wet cloth is often the very best But it is sofficient to wash the wound repeatedly with a stree. eclipse these feats remains to be seen, and an upporsolution. It would be well to keep a bottle of it
tunity vill be offered for testing the point at the
always on hand, mair so strong that more or ire
forthcoming international skating contest in the
vicinity of Rotterdam, which is promoted by the
urated solution, and really such a solution as this is
Anglo-Dutch Skating Association, and has the supformed when the dry sola is sprinkled on and covered with a moistoned cloth. It is thought by some that lish Minister to the Hague. Reports of achieve- the pain of a burn is caused by the hardening of the ments by members of the skaling clubs in Friesland albumen of the flesh which presses on the nerves, and and North Holland are circulated, but we shall be that the sods dissolves the albumen and relieves the

### THE DRY GOODS TRADE.

the state of the s

\_\_\_\_\_\_\_ NEW YORK ADVICES.

R

Rea You, Pelicary ith, 1946. come with at February has opened stormilly in to secent. t so much so, that It ber not only relously linger de i tustuces liere, but elsawhere in many pette of the atty. The rivers are to can over, r diear travel que by Me, is the door,

all to to return to their homes to account of the met be kward in their purch are of aprior of a sofiable goods than they would have been had the ver testwithstanding all thus, a large number of nonof newton-bands in the tanket and baye to the pur-dent layers are in the market and baye to the pur-chains of staple and scasonable goods quite fairly, taking trade comparatively active. Our city jobbers has also been making needed a lections in various to complete assortments, and to get their different departments in good shape and working order for the expected or death of the retail busers of the traid ou att leading makes of goods. With the jobsether may be some elight cutting under agents cures, but that is mainly due to the advantageous aperial factances where competition cuts very closely to here the good assortments in the presence of a strong tem, buoyant market. And agents as a rule are sold less up an all desirable makes of both moollens and cottons, so that there would seem to be no supplies or stock of moment in any one line of the same to occasion any fear or anxiety, or to weaken in the least the firm position which they are at present maintaining. Not only are staple goods in cottons and weellens well under the control of orders, but seasonable fabrics of a popular character and descrip-tion are literally placed on orders for sheed of the production of the Louis, and in many cases the entire seasons product is engaged so to ahead on orders that in some lines of the same it

will be hard for late buyers to procure prompt or

Dry goods are firm and the general situation is sate stactory and encouraging although at the moment trade in spring goods is retarded to some extent by the extreme cold weather. The severity of the temperaof winter goods to an unusually low point, and in this way is contributing, to a great extent, to the future health of the market. A good deal has been done alceady in preparation for spring and summer wants. and with a favorable change in the temperature there every probability of an active movement in all departments. Some descriptions of fabrics of this class are sold far to advance of production, and supplies of all kinds are exceptionally well under control. Print loths are quiet and a shade easier. Prints are tirm at recent established prices, and some at les are sold ahead but the weather is against general activity in light work. Cotton goods are in many cases sold

The largest single item of freight eastward over the Pacific relivends is wool, exceeding in tourage ten and wine. The product of the State in 1880 is reported to have been 44,874,200 lbs., of which 44,566,800 lbs. were received at San Francisco, and the balance ships pel direct to the east. Besides this San Francisco received 7,022,500 lbs, from Oregon, and 275,000 from ereign sources. It appears thus that substantially the whole wool traffic of the Pacific rallroads originates on the Pacific coast, and none of the large Australian production coaks a market by this route. Wool is the on the Pacino cones, and south the Pacino control of the Pacino control only important agricultural product of the Pacino vast that reaches the Eastern or European market by mi -- mosely all the wheat and most of the wine go by see around Cane Horn Of 51,571,700 ibs, of wool marketed in 1880, 9,055,400 were consumed in Callfornin, and of the 42,816,300 lbs. that were shipped, 71 per cent, went by rail, amounting to 15,196 tone. or about five our loads daily. This, it must be ressen-bered, is usually the largest single item of east bound freight over the Central Pacific. In some years, how-ever, burley shipments of greater weight have been made. Burley and not wheat is carried, because the market for berley is in the west, and it does not have to be carried mass than two thinks of the out five our lo to daily. This, it must be rememto be carried more than two-thirds of the way acros ations, while the market for California wheat le exclusively in Karope, and it is delivered there from San Francisco by vessels around Cape Hora at preduction.

much loss than a rall rate from 8 in Francisco to Nan-York based even upon the low trunk line rates from this work of the fatter last summer would be also me the propose of establishing a base amounted to about 74 cents per lasted from 5 an electric last summer would be uncounted to about 74 cents per lasted from 5 an electric last of 1 and 1 From boo to New York. The was alse entry from Sate Fram lie o to Lay (pool of rates you) be to be about 25

of and the transcription streets from the first state of the first sta melemency of the weather, and exerting breatern a shringer point do handke hers, longer dezen above term similar reason have been most likely a velocie, the type ex 4 role attended. We taken straiges prison do barether hers, temper deren these finding lang and L more resent, we also more full und somet than my hitherta published

live months ended languary at or 617.821 bales to real the reroute overland, of which 334,417 were to northern builts due t, against 3:2,440 bales last year, ships mepts to Canada, same time, 15,680 below, against 12:240 bales last year and the first of the manufacture of the constructed for the manufacture of mepts to Canada, same time, 15,680 below, against 12:240 bales last year. 11,904 bales, total takings of northern mills, the same period, 1,110,001 bales, against 1,120,216 tected in case of fire by an apparatus know as the Amount of this year's represeived at ports and points.

The Hodon Cotton Factory will shortly be produced in case of fire by an apparatus know as the tected in ca of overland crossing during two months, 4,32,460 by the Providence Steam and Clas Pape Company, of

modition which they hold with respect to certain makes | Out , by Mesers Clault Bros., of Montreal, arrived here position which sheep away with respect to remain makes. Ont, by Mesers, tignit Bros., of Montreal, arrived here of staple, each, especially cottons, which they bought on Friday fast, and took a survey of the site upon early and price to the late alvances. On all other which the building will stand. They also negotiated lives prices to generally being firmly held, unless in for some of the material required in building, and we to 48 girls alone, at the opening

> -The rear 1880 has not proved a profitable one to American manufactures of silk goods - Protection was greatly atimulated, and while the spring business was more active and "rushing" the fait market was over-burdened by the home production added to large importations. But appearances now indicate that the hield in the office of Measts Cantile, Evans & Co, the excessive production will not be carried into another arrangements for building as early as practicable in sonson. The Silk Association of America thus states the production of finished goods in the United States for the year ending December 31, 1879

will be hard for late buyers to procure prompt or even fair assertments. Legitimacy and conservation	the production of finished goods in the Uni for the year ending December 31, 1879	icd Plaics
and modern brime factors of the situation, and there	Maclilae twist	\$5,891,290
is apparently not the slightest trace discernible toward	Sewing silk	778,350
the speculative.	Flore silk	166,935
The Philadelphia Record, of Folday, February 4.	Dress goods	1,898,525
sava	Satins	1,100,175
Dry coods are firm and the general situation is sai-	Tio siika and scatfe	547,675
dictory and encouraging although at the moment	Millinere allka	977,495
trade in anting goods is retarded to some extent by the	I Broad couls not above enumerated	539,655
extreme cold weather. The severity of the tempera-	Handkerchiets	3,583,125
ture, however, is enabling dealers to reduce their stocks	Itibiona	3,535,205
of winter goods to an unusually low point, and in this	Laces	406,300
way is contributing, to a great extent, to the future	Braids and bindings	82H,355
health of the market. A good deal has been done al-	Fringes, dress and clock trimmings	3,590,800
ready in preparation for spring and summer wants.	Cords, tassels, and millinery trimmings	
and with a favorable change in the temperature there	Upholatery and military trimming.	947,495
cvery probability of an active movement in all de-	Other tripmings	141.180
partments. Some descriptions of fabrics of this class	City nature in suppliesant and mixed goods	123,759
partiagram, come descriptions of manufaction and supplies of	Silk value in upholstery and mixed goods	- 60,00

THE - BOHEMIAN DISASTER

Total. .. \$19,983 630

It creates supply is light, and per orders are booked only at valoe.

The creates supply is light, and per orders are booked only at valoe.

The creates supply is light, and period on the control of th

-Mr. John Ward and Capt. Foster, of Smith's Falls have purchased what is known as the Gould property, including grist mill, saw mill and woollen factory, for the sum of \$13,500.

...It is proposed to establish a considerable shoe fac tory at St. Lin, a flourishing village about twenty-five miles north-cast of Montreal, and the present terminus of the Laurentides Rallway.

-The canaing of fruit and vegetables is to be carried on by a new company at Simcos, Ont. There are to be some sixty employees in the new concern, which is expected to open in May.

-On the 31st of January Rathbun & Son, North Emit, shipped at this place, four car-loads of doors for Liverpool, Eagland. Almost every week this firm ships a large quantity of their manuscross to Europe.

-Au effort is being roads to cotablish a bee! root sugar factory in Tileenburg, an enterprising town south of Ingernoll, Out The capital at the company is \$100,000, the greater portion of which is subscribed.

—The Mesers. Ogilvie, of Montrual and Senforth, are having their flouring mills rebuilt upon the Hungarian reller process, used by Esthbun & Son, at Millpeint, on stones being needed at all in this new method of flour

"Mesers, Desorment & Co., Montreal have ourchared the premises from No. 127 to No. 141 64 М.,

-The Montreal Learn portation to purpose extende ing their operations by the construction of a men ing tien operation of the state of cataling 2 new load, it. At the angular meeting of shareholders on

will rest it is such above. The faith when completed, will be open the first in the Printmeter.

The titre machine, which is intended for Mr Recler's poper null Campbelliord, has been completed. and macronstruct to the buildings on Tursday last Lichance statement shows the total movement for it was mainty fured at Whytes agricultural works In a ten weeks home we hope to see excitthing in good running ord r in the interior of the new

artry, which is close as usual. The market on are providing crossing unting use months, 6,372.440 by the restriction of the PH Camps site presents a good strong front, and selling values bales, an increase compared with last year of 125,944 little Island under the supervision of Mr PH Camps of third and second hands are bring well mains. Takes ent, and John J. Brown, architect, of the new woollen will start the sprinkler, and a copious discharge of mills to be erected in the village of Campbellford, be in constituted in about the sprinkler will be the constitute of the sprinkler will be the sprinkler. be in operation in about the weeks, and will cost some \$1,000

-Hon M II Cochrane, of Compton, Duncan McEach which the building will stand. They also negotiated for some of the material required in building, and we believe it is their intention to purchase several residences for the foremen of the different departments of the manufacture. The building will be about twice the size of the woollen factory now occupied by Mr.

| Manufacture | The building will be about twice the size of the woollen factory now occupied by Mr. Benlor, and a commencement will be made as a son as mides, shorp and swine in the North-West Territories, the weather will permit. Employment will be given of dealing and trading in them or any of them throughout the Dominion, and of shipping the same to totelan countries; and of acquiring and holding the property required therefor.

-The Montreal Witness says At a meeting on 31st January of the Provisional Directors of the new Cotton Company for the manufacture of bleached cottons, the spring were so far in shape as to warrant the promoters in issuing their prospectus at ouce, and securing subscriptions for the balance of the stock. A large amount has been already subscribed, and with the inducements such an industry well organized and conducted offers, investors may well be glad of this opportunity.

-A Montreal Witness reporter is imformed that out of some 800 men employed by Mr. F. B. McNaruse and his tirm on his Welland Canal contract, 600 are French-Canadians from this Province. The canal, with 12 feet of water on the mitro stil, will be ready by May first. Sixty pairs of gates are already made by the contractor who has this matter in hand, thirty more will be ready by March the 30th, and the remainder, the whole number being 110, will be ready by the time appointed. Mr McNames points out the necessity of the water being deepened to 20 feet at the grain elevators to meet the wants of the vessels ' awing 20 feet of water, being provided principally by the liuffale grain forwarders

WINDSOR HOTEL, NEWCASTLE L. D. Datum Proprietor. New bouse and new furniture through

SEED FOR ESTIMATE.

### PORTER & SAVAGE TANN DR.

and manufacturems of Leather Briting, fire engine hose, harness, Muxiasins, lace, russet and

OAK SOLE LEATHERS Office and Manufactory 496 VIBITATION STREET, MONTREAL

DICONOMINE With increased capacity of Steam Power, by setting scalers the Jarvis method. Waste free ings, wet peat, wet hope, specitian and dyswoods, &c. The same principle as the Sieman's steel process; waste gange utilised with het air on top of the fire. Over 60,000 H. P. set utilised with het air on top of the fire. Over 60,000 H. P. set utilised with het air on top of the fire. Over 60,000 H. P. set utilised with het air on top of the fire. Over 60,000 H. P. set utilised with het air on top of the fire. Over 60,000 H. P. set utilised grain her, stillable for all hinds of fuel; cannot burn of at the conduct free circulation of air. Mention this paper when you write to.

Jarvie furnach company,

### THOS. SONNE, No. 177 & 179 COMMISSIONER ST..

MONTRUAL,

### Nationaler and Managertierer of tents, tarpaulins,

Waggen & Heres Covere and Od Min elothing.

### China Charles and the second second second PATENT NOVELTY WAGGON TOP. notes of Warning

Prepared in the best interest of our Canadian Youth.

Caution to Young and Middle Aged. Advice to Married and those about to Marry.

SEND YOUR NAME and P O WITH A . STAMP Heilly Recommended by the Press and Cherye.

Prof. J. Y. EGAN, Toronto.

IP. THOS. OBBB E. J. MAJOR I

#### Major & Cibb. MANUFACTURERS OF

WIRE CLOTH AND WIRE GOODS, Importers of Radway & Mill Supplies.

Africadors for work given to Builders and Contractors 48) CILESIN (8-Files, Belting, Silicate Paints, and Paper Makers' Supplies.

## 646 Oraig Street, MONTREAL. DUNDAS COTTON MILLS CO.

DUNDAS, ONT.

drey domestics, Tickings, denims, Checked and striped shirtings Copton Bades, Warls, yarns, En

The productions of these mills contlass to have a deserved, bigh reputation in the trade. The proprietors are determined to maintain the quality of unsurjamed axcellence they have heretofore held.

### P. Freysing & Co. MANUFACTURERS OF CORKS

Every description of Corks on hand and cut to order. Also orkwood and CORK LIFE PRESERVERS. 19-13) PO BOX 493, TORONTO, ONT.

## BRAYLEY & DEMPSTER

MANUFACTURERS OF

# WROUGHT IRON AND SADDLERY HARDWARE

SCHEW & STRAP HINGES & SPECIALTY

47 & 49 King William St.

### HAMILTON, ONT., CANADA.

TO LUMBERMEN. The undersigned is prepared to quote prices to Lumbermen for shanty and all other description of Blankets.

Money can be saved by purchasing direct from the manufacturer.

ARTHUR TOORER NAPAREE

## to malteters.

THE undersigned beg to inform malatters and the trade that, having lately added new and powerful steam machinery for the especial purpose of weaving extra strong STEEL WIRE CLUTH for mult and drying hile Score, are now prepared to quote prices for the above scode. These score are much more economical than from tiles, saving from 30 to 40 per cent. in fuel and labor, and producing a brighter sample of malt.

TIMOTHY GREENING & SONS. DUNDAS, ONT. [6:33

# Metal & Rubber Stamps

KENYON-STEWART MFC. CO.

Manufacturers of the argest variety of Dating, Office, Rallway and Business Stamps, Seals, stc., in Canada. Awarded Broate Medal at Toronto Industrial Exhibition, 2000, Office and Manufactory:

36 KING STREET WEST, TORONTO

## DOMINION ORGANS & PIANOS

THE Rangest and must complete factory in the Deminion. 140 x 100. Highest honors ever awarded to any Maker in the world.

Medat and Diploma at Centennial, 1876

mer Medal and Diploma at Sydney, Australia, 1877.

per Gold Medal at Provincial Exhibition, Toronto, 1878.

ME Highest award at Industrial Exhibition, Toronto, 1879.

We are now manufacturing Square and Upright Planes. Best in the market. Correspondence solicised Send for Ilitarizated Catalogue. Mailed free.

ADURES:

# Dominion Organ Company BOWMANVILLE, ONTARIO.

TRMACH COMPANY,

DANWEL HOUSE, COROURS. This best is in the control of the town, next to Term Hall and close to Post Office.

Towns 2) per day. Commedican Sample Rooms. [6]

A StCationies and Morration or important manube timbe existed your correspond in recently took is con through next of the fix to be a located there, thinks 16% a short sketch of the various frelustrical would be interesting to party real real the Incesional Works

#### THE CITY OF ST. CATHARISES

to etcap pulation of about 11 con and is most ad-Yantage risks situated on the Welland Coul, about 9 and 64 from its outlet into Lake Ontatio at Port Dale onely, and it talks from Hamilton by the Orest Western Rules - I'l largest

N. C. W. W. C. S.

in the Darlinson owned by Messrs R. H. Smith & Co., are situated here work being curred on in a line stone toubling on the sincipal street, and which has a time appearing. The new binery is run by steam power. and is all of the most approved description, and turns out a me quality of work. Between fee and 0 works turn one has employed many of them working over- machinery. And now we come to the last, although time. In their west this ratory is time. In the r ir of this rectory is

#### TO LESS AND STOLAN

where some it mechanics are kept base, principally on engines and boilers for marine purposes. The works consist of three-buildings, used respectively as a ma line stop toller and blacksmith shep, and foundry. A little higher up between blocks 3 and 4,

#### COTTON BATTING FACTORY,

which is at present only running at night, in consequence of it sufficient water, so that we were unable to ee it in operation, but understand that quite a live business is tring done. A few feet further on are

#### PLEP WORKS

of C.P. Mills, which were first established in 1837. This bun have in their show-room, some very fine camples of the various kinds of pumps of their make, from the common wooden pump to the most elaborate styles of iron pipe and force pumps. In addition to good water privileges, there is a steam engine of ample capacity to drive all the machinery in case the water fulls. This factory was first located where the Shickluna Ship Yard now stands, and was the ploneer in-dustry on the Welland Canal Some further distance up the canal, and close to the swing bridge, are the

#### BE CATHABINES WHEEL WORLS.

The main building is 150 x 50 ft, 3 stories high, and the hub factors is 80 by 24, 2 stories high. Menara. Allan & Co., the proprietors, devote their principal attention to the "barren" patent wheel, for which there is a growing demand, the hub being much higher than on the ordinary wheel. The following works, which we did not have time to visit, but purpose describing in some future issue, are also situated here, viz. -The Welland Vale Edge Tool Works; Shickluna Saw Mill and Dry Dock, Taylor & Bates' Brewery, four grist mills, Gare being owned by Mr. Jas. Norris, and the other, which has a capacity of 400 barrels of flour per tiem, is owned by Mr Sylvester Necion. A saw mill, fannery, and paint factory completes the list

#### MERRITTON

two miles further down the canal from St. Catharines, and has a population of 1,000, although many persons engaged in business there reside in the neighboring city, a line of street rallway connecting the two places. Leaving St. Catharines and following the course of the canal towards Merritton, we shortly come to a very large frame factory on lock 0, owned by

#### BUITHAS A BABSES MANUFACTURING COMPANT,

who are successors to the firm of Collinson, Burch & Company There are employed 70 hands, in the manufacture of mower knives, reaper sickles, etc., and although turning out an average of 1,000 knives a week, have enough orders on hand to keep them busy till the lat of June. This firm have three large establishments in the United States, in addition to this one here, and practically control the market for this class of work. The machinery is of the most complete description, some of it being the invention of Mr. Saml Collinson, the head of the late firm, who, with his partner Mr. Burch, manages the present Canadian business. The mills of the

AT CATHABINES PULP AND PAPER COMPANY.

are on lock 7, and are running night and day with a staff of 31 hands. They do a large wholesale business in straw and wood pulp, and also manufacture wrap-ping papers. They are about putting in another machine which will double their present capacity, Mr. F. W. McDonald, is the president, and Mr. F. W. McDonald, is the president, and Mr. A E J. McDonald, the secretary of this company Still following the course of the canal, test the quite extensive saw mill of the Mesers. Phelps, on lock 8, and Disher's woollen mill on lock 9, we notice a new building in course of crection, and on inquiry learn that Mesers. P. & J Phelps intend to utilize it as a

#### HATMER AND BOLT PACTORY.

and will, at starting, require about 25 hands. The severe weather has retarded their progress materially, but they hope to be ready to commence operations at an early date. Proceeding onward in quest of further information, pencil and note book are again requaltioned, to jot down a few particulars of

#### THE CANADA WHERE WORLS

of Messrs. H. Patterson & Co., who commenced business here about 12 years ago, and have extensive premises This firm, in common with other manufacturers in their line, are experiencing a good deal of difficulty in precuring timber this winter, it being exceedingly scarce in Canada; they have to import largely from the other side. Their works are running on full time, and employ about 30 hands. The next institution visited

#### LINCOLN PAPER MILLS.

These nulls are very complete, in each and every appointment, and are most substantially built of stone On the first floor of the main building is a really magnificent Rice, Birton and Phall machine, which con tains 8 drying cylinders, 40 inches in diameter, and two sets of callender rolls, each set consisting of 12 chilled iron rollers. In another room, 125x45, at right angles to the one just left, are six 800-journierow engines, with 44-inch rolls, each ougine resting on a solid stone abutment, and on a wing off this room is an immense 0,500 pound stock boiler. Although making all kinds of paper, their specialty lies in Manilla flour sacks and grocery begs, of which they can turn out three tons daily. The paper beg machines are a perfect marvel of skill and ingenuity, converting in one operation an endiess roll of paper into lags already folded, pasted, dried and counted. The motive power is supplied by a 20-foot head of water and one each of Leftel's and Salt turbine wheel, giving a 200 atlox.

Manufacturing Industries of St. horse-power when combined The writer would like to give a his resextended description of this fine in Ill. did a no permit. The next on the list visued was the massive stone tuilding known as the

LT- STEEL COTTON MILES.

but as the ready or was not in at the time, a build sketch will have to suffice for the present. Its ex-tent, however, may be approximated when one learns that 22 hands and employment within its walls. This fulfill to being run to its full capacity, and a quantity of new machinery is now on the ground, with mere to acrive, which when set up will necessi-tete the employment or additional labor. At the rear of this mill is mother cotton factory owned by Mosses hing & Holan, known as the

#### MAINITION CORTON MILLS

and in which 75 hands no I employment at full time, and occasionally have to work overtime. I nose mills which are the ploneers of the cotton industry in this section of the country, came into the possivaton of the present firm about five years age, since then they have added from time to time additional labor-saving

#### MERBITTON PAPER MILLS

of Mesers Blordern & Co., which are so well known that any extended description would be superfluous, The buildings are built massively of stone, and present a fine appearance, and cover a large area of ground. These mills are as usual running night and day, requiring a force of two hundred employes in the various departments. The orders on the books of this firm are sufficient to keep them working to their fullest capacity for twelve months to

#### PACIEITIES FOR HIPPMENT.

The shipping facilities of both St. Catharines and Merritton are unsurpassed, as the Welland Canal gives them a water connection with the great lakes to the West, and by way of the St. Lawrence river to the scaboard on the East. The Great Western and Welland Railways pass through both places, and the Great Western, especially, has been and is still an important factor in the prosperity of the place, as by means of its connections, shippers can readily distribute to all parts of the continent, as it taps all the principal trunk lines. There is a rapid passenger service of five trains each was daily, and the road being managed with a view to the comfort of the travelling public, many obnoxious features of ordinary railway travel are avoided.

#### CALDWELL IRON MINE.

#### (from our Travelling Correspondent )

LANARE, 2nd Feb., 1881. During a flying visit paid by your correspondent to Lanark Village he had the pleasure of a brief conver-sation with Mr. Boyd Caldwell anent mining matters in that region, and was shown some most excellent specimens of fron found upon that gentleman's property, situate about 25 miles from his mill. The mine from which the ore is taken is situated in the township of Lavant, about seven miles from the Misstanippl station, the present terminus of the Kingston & Pembroke linitrond, and when that road is extended to the Clyde (and the work is in progress now) it will come within a few acres of the fron yielding spot. The roin is over 150 feet wide, and Messra. Caldwell & Co bave taken out, up to the 1st of December last. about 4,000 tone of ore, which they are shipping to the United States. Some idea of its richness may be learned from the subjoined analysis made by Professor Chapman.

ANALYSIS OF IDON ORE FOR MESSAS BOYD, CALDWELL & CO. LANARE.

Magnetic oxide of from		89 4
Alumina Leeni ozide of magnesia		trace
Titanie acid		trace
Magnesia 1.05 Intermixed Carbonia seld 1 97	Dolomite	4.10
	********	6 3
		\$7.9

Equal to metallic iron 64 48 per cent,

This ore is of exceedingly good quality. It is rich in iron, quite free from titanium, and practically free from suiphur, phosphorous and other objectionable The intermixed dolomite (to some extent a matters. natural flux) is present in patches only, so that many parts of the sample averaged 60 to 67 per cent. metal-

The mine has been leased to Messre, Folger, Flowers & Co., who commenced working it in December, and they have now about sixty men engaged in tak-ing out ore for shipment to the neighboring States. another mine of equally good ore on the line of the proposed extension of the Kingston and Pembroke Railroad in the same neighborhood, which appears to be rich in minerals. Lead, traces of copper, silver and gold-bearing quarts, taryta (the latter in large quantities) are found, and some excellent specimens have been obtained. In the spring Merars, B. Caldwell intend developing other mines of Iron and varions kinds of valuable minerals known to exist on their lands in that section of country, and mining prospects there during the coming summer bid fair to

be profitable to those who engage in operations.

In the course of conversation with Mr. Caldwell, the question of smelting the ore in Canada came up, and he expressed himself somewhat in the following terms: " It is a matter of regret to see such quantities of ore being shipped to the United States, only to come back to Canada in a manufactured State. Why not have smelting works established at the mines where there is, as a rule, abundance of wood where-with to make charcoal? These mines in particular are in the heart of "a wooden country." of wood is almost unlimited, and to be had for the mere cost of cutting and hauling, and there are abundant railway and other facilities for transporting the manufactured article. If, continued Mr Caldwell, it will pay to freight this ore long distances to the United States, and pay duty on its entry there, it surely ought to be a much greater source of profit to have it smelted on the ground, where all that is necessary can be easily and abundantly obtained, and thus allow our own country to reap the benefits arising from the establishment of such works. There is no doubt whatever but that there is a mine of wealth in this for some enterprising men who have capital and energy to carry it out."

If your correspondent might be allowed to express his humble opinion, he would endorse what Mr. Caldwell says relative to the smelting of the ore at the mines. If the Americans want our iron, they will buy it as readily manufactured as in its crude reatebesides charcoal smelted from is always the best, and your correspondent has been informed by those who profess to know, that the best steel is prepared with plas charcoal. The idea seems worthy of considerTHE WELLAND CANAL

An American View of Caual Competition. The latest force of Berlie ar . Las the following -The enlargement of the Canadian canals, now in progress and shortly to be completed, is very properly a matter of considerable interest to the commercial men of the I nited States as well as of Causds. No one can fall to see that the screat lakes and the St Lawrence ofter immense facilities for the transportation of merchandise. Those aware of the actual circumstances know that they have carried off a large part or the trade between the west and the ocean, and now the question is arising whether the facilities atribes a stranger in the large size of the facilities about to be offered will not enable from to secure & and the stores connected with them. This is it. inuch greater part of it. Leaving out of alght the early history of the St. Lawrence canals, it need only be said that in 1871 the Canadian Government declided to undertake their enlargement, that a uniform depth of twelve teet of water might be obtained. In harvest and Christman, and the million bigs it is bosen, however, strong representations were made by stores a sufficient quantity for his requirements are many influential merchants and commercial corporamany influential merchants and commercial corporations on the expedience of baving the different chantions on the expedience of baving the different chandelivery, this causes the employment of considerate neis deepened sufficiently to admit the passage of nels deepened sufficiently to admit the passage of capital, as well as large storchouses; but millers vessels drawing fourteen feet of water. This view of Ireland are mostly well to do, and the milling the case was shortly afterwards adopted by the Governess is honored by at least one member of the peer. ernment, and on this book operations are being proceeded with on all the principal works between Lake Erle and Montreal. The distance between these two points is 375 miles. On it the e are seven different atretches of canal, having in the aggregate a length of 501 miles. On these there are 52 locks, six of them being guard-locks at the different upper entrances, for the regulation of the reach below them at periods of high water in the rivers or lakes. The total height overcome by locks is 533 feet. The altitude of Lake Erie, however, is 550 feet above that of the St. Lawrence at Montreal; the difference of 17 feet is overcome by the dip in the surface of the lakes and rivers. The locks on the enlarged canals are to be 270 feet in length between gates, 45 feet in width, and to have a depth of 14 feet of water on the slile. It is expected that this will enable vessels of 1,000 tons burden to pass through them; and it is alleged by some parties that as the present tendency in shipbuilding is towards increasing the breadth of beam and sectional area of freight vessels, it is probable they may shortly be navigated by vessels capable of carrying 1,500 tons. The effect of the enlargement will be to open the way from the western lakes to Montreal to a large and profitable class of vessels used on the former, which have as yet been shut out from the through navigation. That done, it is expected that shipments will be made from any point east of Duluth to the point of export abroad. There can be no doubt that such shipment, over a line of navigation requiring no breakage of bulk throughout, cannot fail to offer many attractions to shippers, or that it must secure nearly all shipments from the British North-West Territories, unless the Canadian Pacific Rallway should offer superior facilities; but as this railway has yet to be built, and when built will have about 1,000 miles extending from Luke Nip's-ing to the Lake of the Woods, or nearly two-fifths of its entire length, running through a country which must lang sync," when the running and standing balanalways remain a wilderness, it will be run under disadvantages peculier to it amongst relinade, and be the less able to compete with the chief water route. The great point of competition between rail and water routes, and the St. Lawrence and Erle canals, is at the Welland canal, running from Lake Erie to Lake Ontario. Above this, the only break in the navigation to Duluth is at the Sault Ste Marie canal, built to overcome the rapids at that point. Hence, on the upper lakes navigation successfully competes with the railways, the profits will admit of it. As a general rule, the The Welland Canal is 261 miles in length; navigation is dressed finer in Ireland than in England. This tion through such a channel is a very different thing rendered necessary by the use of a large proportion from navigation over waters practically as free as Russian wheats, which are rich in gluten but dark in from navigation over waters practically as free as Russian wheats, which are rich in gluten but dark a those of the ocean. Still, the fact remains that it color. It would surprise an English miller, where has been in favor during past times, and if so, why should it not be in increased favor when offering in-creased facilities? It was built originally by an incorporated company, and opened about 1833; but as it falled to become remunerative, it was purchased by the province in 1841, and immediately afterwards enlarged. New locks of stone were built, those in for a baker's atrong flour. But the Russian wheat the interior being 120 feet long, 24 feet wide, with 84 feet of water on the sills, and those at the entrances 200 feet long, 45 feet wide, with 9 feet of water on the sills In 1843 the Interior locks were lengthened to 150 feet, widened to 261 feet, and slik, beginning with No 5 or No. 6. The English despected to 9 feet of water on the slife, and the whoat is "killed" in order to grind the Russian whoat entrance locks made 113 feet deep. In 1853 the ava-lable depth of water for navigable purposes was slan wheat meal pass through the coarse silk at the made 10 feet throughout. In 1854 the clay or earth head of the recis. The Irish miller acreens mest parts of the summis level were increased to a width thoroughly his Russian wheat, alightly damps it, and of 50 feet at the bottom, and now it is being enlarged so as to permit the passage of vessels drawing fourteen feet of water. Thus it appears that increased dimensions have been steadily required on the canal. The enlargement commenced in 1842 fully doubled the capacity of both the prism and locks of the original deergn, while the present culargement more than trebles the prism in sectional area. The tonnage capacities of the two canals are expected to bear a similar relation to each other; that is to say, the tonnage of vessels which can pass through the canal now in course of construction will be fully six times greater than that of those able to pass through the original canal handed over by the company in 1841. Such is the accommodation which will shortly be oftered to vessels navigating the upper lakes. Will they use it, instead of transhipping at Buffalo, and come on to Lake Ontario, and should they accept the latter course, will they tranship at Oswego for N w York, or go down the St. Lawrence and tranship for Europe at Montreal? These are interesting and important questions. Canada has for a long time been flattering herself that the trade of the great west must go down the St Lawrence, but it has not yet done so. There can be no question, however, but that increased inducements will be offered by these new canals; or that they are likely to render Oswego a formidable rival to Buffalo. But whether the inducements offered will beaufficient to cause any considerable transfer of trade from Buffalo to Oswego, or from New York to Montreal, is not so clear. The former appears much the more probable of the two; for there can be little question that navigation from Lake Eric to New York via Uswego, the new Welland Canal, and Lake Untario could be accomplished much more quickly and conveniently than by way of the Erie Canal from Buffalo. The relative merits of the sail from Kingston to Montreal without breaking bulk, as against a transhipment at Oswego and shipment on the canals and on the Hudeou river to New York, a port two days' sail further from Liverpool than is Montreal, is a more delicate question. The enlargement of the Eric Canal, as proposed in the late report of State Engineer Seymour, would, of course, go far

routes to New York in favor of the latter city.

MILLING IN IBELAND AND IN ENGLAND The prescrib that one-ball of the world disc. know how the other half lives to positivity questo milling. How great the difference of tweet to country windmill on the breezy downs that have the tarmer's gilst and the glendays of e. tager, and the city flour mill on rever to its cargosa of grain alongside its elevator when we examine the mode of manufactors the conditions under which it is priceed in vie. countries. Unis difference becomes more apiarire To compare milling in Ireland and in English is the object of this article. The first thin to ... partly to the fact that Itish millers return more the in stock in projection to their business than . English millers, but the principal cause is that to Irish peasant farmers sell all their wheat betw. being a miller. In consequence of the lumidity, the climate, it is impossible to harvest wheat an clently dry for grinding without first kiln drying it but by constant practice the art of kiln drylog has attained to a very fair approximation to the nature process of drying by the heat of the sun Smokel-.. mailing coal is used, and twelve or fourteen quarter, of wheat can be dried at a time on a kiln 18 fee square. The wheat is spread on the wire about 44 inches deep, and lies there for an hour and a half in is then turned and lies another hour, and unless it is unusually damp, a third hour of heat will dry it sur-ciently. It is then thrown off the kiln to a coole, floor, and after lying two or three days it is turned onor twice; from thence it passes to a storing floor, when, If the klin-drying has been properly performed, the wheat will keep perfectly sound, with but little atter. tion, for twelve months. As a matter of business however, the wheat likely to be required for grinds. at an early date is not so highly dried as wheat to longer storage. The loss of weight in drying varies from 5 to 10 per cent, according to the original condi-tion of the wheat. It is obvious that the above proceases, which require considerable labor, store acros. medation and capital, add largely to the ultimate in of Irish wheat, and thus it is sold in the first instanat what appears to be a very low price when quote i in the market reports. A kiln on the mill premisbrings them within the purview of the excise, and flour mills are periodically visited by the inland renue officer, to guard against anything stronger the flour being manufactured. The dampness of the cla mate in many respects unfavorably affects the man-facture, but difficulties are but incentives to the energetic, and we believe that Irish millers are at least equal in skill and good management to their compare in England and Scotland. They have over been ready to welcome and adopt improvements, from whatever source they might emanate, from the days of "auld was first introduced, t. the present time of rollers and purifiers. However, the same anomaly presents itself here as elsewhere. Close to a mill containing even improvement is another one, an old fashloned streeture, whose proprietor is very skeptical as to the va'n of any modern notions, and yet his flour is highly esteemed and commands a ready sale. Perhaps the explanation of the anomaly is that our last fided makes his flour by the axiom "Buy none but the best wheat, and put in plenty of it." Not a lad plan who experience has been principally confined to soft and white English wheats, and who regards Russial wheats as irretrievably dark, to find what beautifully white flour and bread can made from one-half Russian and one-half No 2 American, which is not an unusual mixture must not be dealt with after the manner of too man-English millers, who shoot them in the proportion : one-fourth Russian to three-fourths English wheat screen and grind them together and dress through a properly, and specks and dark particles from the Rusallows it to lie until the water is absorbed, and if, as: probable, he grinds it separately, he will make 33 pcent of middlings (this can be done and yet have clear bran), he then dresses the first run through a sikcommencing with No. 9, purifies and rolls the told dlings, and dresses them through Nos 10 and 11, at ! runs the middlings flour and first-run flour together About 62 per cent, of flour of good color and great strength is thus made, and a further 10 or 12 per cent of second quality will be made et a subsequent purfying and rolling. The American portion of the mix-ture is dealt with in a similar manner, with the ception of damping. Millers in Ireland attach the very highest importance to thoroughly cleaning the wheat, as they believe that if any impurities have excaped the acreens, these impurities will be reduced to a finer powder than the flour, and cannot be removed from it, and it is a very small mill indeed that denot use several wheat cleaning machines, while in thlarger and modern mills there is hardly any limit to the number of machines employed. There is a lw: and increasing demand for strong flour, and a coasterable importation of Hungarian and other higher classed flours. This competition has been met in spirited manner by some Irish millers, who have dovoted much attention to the new process, and who now make flour but little inferior to the best Hungaian brands. In this attempt they are tavored bevoreithe millers of the rest of the United Kingdom by the demand in the rural districts for very low qualities : flour, qualities so low indeed as to be unsalcable in so part of England with which we are acquainted Repeated grindings of tailings from rollers and purities, dressed through fine silks, produc-flours of better color than would have been In dealing with these residual anticipated products very fine dressing is a desideratum. Skilled labor is fully as expensive in Ircland as in England but unakliled labor is largely used, mill laborers wages being scarcely more than one-half what they are in England; for instance, 10s or 11s, per weck, without any cottage or extras, is the usual wages of the laborer who may have worked in a mill from his boyhood. This low rate of wages is not without its to solve the question as to the Oswego and Buffalo drawback, and has led to lavial employment of labor, and in this respect only, we think, will an English

in the are becoming more and more apparent to by the public, -three timen. hick millers, and I trust that the local associations but soon see their way toubolish such an indefendble teld Any notice of Irish milling would be incomto without reterence to the manufacture of white and reflow matte flour. These flours are largely used, the peasantry either mixing them with wheaten flour for he admedding, or using the's in Heu of onemeal in periodic. The malze is ground by very open bulir topes, driven at rather high speed-say, 140 revolutions per salmute-and the meal is dressed either through a reel covered with a brass wire-cloth of suitelle mesh, or by a horizontal rieve having a recip-to-diac metion.—C. J. II, in The Mill r

Control of the Contro

#### OPERATIONS OF THE UNITED STATES FISH ERY COMMISSION.

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Prof. Baist, chief of the fishery commission, gives a ploning account of the work to be done the coming easch, with the aid of their now steamer. Ho pre-licts that the result will be astonishing. In 1873, done fairly in turning out fifty millions. This season we have arrangements perfected by which we can hatch 2000,000 shad at one time and on one steamer, and we an do this ence a week anyhow. For the list time this sesson we will send out a hatching teamer, with a capacity, as I have stated, for produc-ng 2,000,000 fish at one time. This ateamer has just ein litted up. It is an ordinary sea-going steamer, wh water, that overflows gradually, the weight of the eggs keeping them near the bottom of the buckets. We have refrigerators with which we can regulate the amperature of the water. This we hope will enable as to carry the work of hatching away into the sumner, and save millions of eggs heretofore lost. shall start very soon to the coast of Georgia or South Carolina, where the steamer will begin with the first ipening of the shad. We shall move northward as e senson advances, and will probably close the hatchng of shad in the Susquelianus river in June, so that following the sesson up we shall get about four uths of steady work with shad. We shall be disapplated if we do not batch from two to three hundred illions of shad during the season. As soon as we seed one with shad we shall send the steamer into new raters, and occupy it with some other fish. We calcute to keep it at work every month in the year, batch. ng its quots of 20,000,000 at a time. We are breeding mon very heavily, and of late are paying much more tention to California salmon It is a harder fish than e Maine salmon, and as it is accustomed to warmer ters will live further south. We brought over last mr two cor-loads of California salmon egge, that cost # \$12,000 exclusive of freight. These are distributed b the various State commissioners. We have brought be supply of salmon up wonderfully. Our first ex-criments with the cod were made in 1878, at bucester, and proved very successful. We turned hem into the bay and the next year there were large untities there. We have now a station at Woods lole hatching out cod and shall breed this fish exten-ively, supplying the New England coast, and plant ige contingents further south, in the Delaware and hour cake. icspeake. We are breeding the Spanish mackers! Chesapeake Bay — We dualt heavily with these fine h last year, but did nothing to what we will do this

ow completely the policy of the Government has een vindicated, and the predictions of the Finance ilulater verified respecting the trade and commerce the Dominion under the present tariff. We did not the time refer to the changes in the form of com-liation in its principal statements, but every one the has had occasion to consult the tables in quesa must have observed the valuable and much seed improvements introduced into the work this par. Formerly the Imports and Exports for each

cessary to refer to the various tables at an expense of ment, but it must in fairness be assemble that the much time and trouble, but now the Imports and Expense of actions and higher are such act to last to a large employment of lubin. Since the shown in detail in one general statement for each. As the Commissioner of Customs observes in his faction could hardly keep pare with the mand, the most minute particles in 1819, the consemption of flour in 1829, the commissioner of Customs observes in his and increasingly actions for the most minute particles in 1829 at the will-be committed with England, promise are better, but debta and to a nominations, and the trade generally is less that the provided at the first that the practice of the channel of the competed for but I regret that the practice of the competed for but I regret that the practice of the competed for but I regret that the practice of the competed for but I regret that the practice of the competed for but I regret that the practice of the competed for but I regret that the practice of the competed for but I regret that the practice of the competed for but I regret that the practice of the competed for but I regret that the practice of the competed for but I regret that the practice of the competed for but I regret that the practice of the competed for the competed for but I regret that the practice of the feeling it less now published. The former pears been considered probe tions, are taken in the two observes in his equal to the desired for most minute particles that the second one in the local is fined then the new adaptive for the nation of the nat to be did at an enlanced price, and if value receive considerable. The Hon, the Migneter of Customs is the furchase price before delivery becompacted, to be concentrated upon the improvements he has per-almost impossible to make the layer toldilide con- effected in the ferm of the tables. The Changes effects he t H. Injustice and absurdity of such unesolded ed are most desirable and will surely be appreciated

#### OFIUM-EATING IN CHICAGO,

Having observed during the last five years, as phy delan of the Washingtonian Home, Chicago, a rapid increase in the number of cases to be treated for oplum-habit. Dr. Earle was led to investigate the practice systematically. Fifty druggists to whom inquiries were put had 23's customers, or an average Some, however, did not sell the drug unless prescribed, others asked a light price, etc. Of these 235 habitual opium-caters, 100 were females. -i - , about 3 to 1 , and of these about one-third were of the prostitute class. As to nationality, Americans, as might be supposed, number most largely in use of the drug (160 out of 235). There were 17 Irish, 12 colored, to Scotch, 7 German, etc. The vice is evidently one of iniddle life, the larger number by far being from 30 to 40 years of age. Hot Dr Earle found one lady, aged 50, who had taken the drug since she ficts that the result will be astenishing. In 1873, was 13; another at 65, taking one drachm of gum are the professor, we were contented with hatching optim daily; an aged couple (70 and 75 respectively) out a million shad. Last season we felt that we had taking a duclim each of morphia every week whenover they could get it; and many young children, and even Intents, are given optime. It is among the middle class that the great majority of optime eaters are found. Many reduced from high social standing with a very large clear deck, which is tilled with provious addiction to drink, unhappy marriage, hatching buckets, all of which can be worked at the rheumatism, neuralgia, wounds received during the ame time. The buckets are fed constantly with war, loss of property, and so on. But the great majority confess that it was prescribed during some disease in which pain was a prominent symptom Ladics generally uso morphis, men of the lower classes gum opium, a few of both sexes use the lineture, while occasionally one is tound taking large doses of paregoric. One widow, aged 50, buys of one druggist half a gallon every week. A large number of ladies take one-third to one amin of morphia daily. Some take a dose two to three times a day, whilst some of the oldest oplum enters take a large desc at intervals of from one to three days.

#### NATIONAL WEALTH

In point of woulds the United States standamear the head of the list-third on the list of all the Western nations. TI Vnited Kingdom of Great Britain and Ireland heads the list with a capital valuation of \$14,-Low Countries with \$11,150,000,000 of capital collectively. These are the valuations made by those countries of their entire resources. What is the annual income per 'manbitant of the various countries? We come to the front in this comparison. The average annual income in the United Kingdom is \$165, in the inited States \$165 also, in the Low Countries, \$1.0 in France, \$125, in the British Colonies, \$00, in Germany, and also in Scandinavia, 285. In this reckon-Ing Russia, with her 20,000,000 people, is cut of sight as yet; she will not be very long. On the score of annual accumulation our case is even better, relatively far better. The annual accumulation of wealth in Germany is \$200,000,000, it is \$325,000,000 in the

It is a well-known fact that the great bulk of the screws used are driven in with the hanner, and given a turn or two with a screw-driver, to bring them flush. Recognising this fact, an ingenious inventor, for many years preminently identified with the business, has brought out a new screw, which is adapted for driv. ing, and which enters the weed without tearing the grain. The gimlet point is dispensed with and a cone grain. The gimlet point is dispensed with and a cone point substituted. The thread has such a pitch that is drives in barb fashion, offering no realstance in entering, but firmly resisting all attempts to withdraw it except by turning it out with the screw-driver. The It is a well-known fact that the great bulk of the tance of the description and imports and exports for each point numbers of the description were shown in separate tables, so that to drives in barb fashion, offering no resistance in entersisting as comparison as to imports and consumpting, but firmly resisting all attempts to withdraw it bilt on Saturda to be entered by turning it out with the accessive. The

tlan, passed away on batutally last after a severe and lengthered illness. This racet remarkable man was born in 1725, at Ecologichau, a small village in Dunfielschire, where his tather, a man of intellect and carnest religious feeling, held a small farm, he re. clive I the rudiments of his education at Annan. At the age of 14 he entered the University of Elinburgh. passing through a regular curriculum, and studied mathematica under Professor Leslie. Intended by his parents for the ministry, he remained at the university upwards of seven years, sponding his vacations among the hills and by the rivers of Dumfrelsshire. At college his habits were lonely and contemplative. After tenching mathematics in a school at literuity for about two years, he devoted himself to literature, and in 1823 commenced his career by con-tributing to litewater's "Edinburgh Encyclopedia," some able anticles on "Montesquieu," "Montaigne," "Noison, and the "Two Pitts," and literary notices to the New Edinburgh Reciew. In the same year he completed a translation of Legendre's "Geometry," to which he prefixed an "Essay on Proportion," and published his translation of Goethe's "Withelm Meister," a work which showed a direction of reading destined to influence materially his future career. On Hampsbire, 197 in Vermont, 600 in Massachusets, the completion of thie translation he commenced his 401 in Connecticut, and 198 in Rhode Island "Life of Schiller, which was published by Inetal-ments in the London Magazine, then sustained by the talents of Lamb, Hazlitt, DeQuincer, Hood, John Scott, and A Cunningham. For Gotthe and Schiller, two of the "true sovereign souls of German literature, his admiration has ever been unbounded, are taking the drug. Most morphia-takers either are and his letters to Goethe have appeared in the poet's or have been married, and many are living separated published correspondence. Having married in 1827, from husband or wife Various reasons are given for the resided afternately at Comley Bank and Craigentaking the drug—/g. its stimulative and happy effect, puttock, a small ustate, fifteen miles to the north-west of Dumirles. In this secluded spot he occasionally contributed to the foreign and other raviews of the day. Between 1830 and 1833 be was engaged in latter year in Frairi's Mogazine. During the negotiations for the publication of this work he was induced to tomove to London where he has a second of the council of the Ontario College of Pharmacy
has been in session in Toronto. The receipts from
August, 1880, to date were \$1,794 77, of which there
tions for the publication of this work he was induced
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tions for the Ontario College of Pharmacy
has been in session in Toronto. The receipts from
August, 1880, to date were \$1,794 77, of which there reside, we believe, since 1834 In 1837 he published
"The French Revolution," a history abounding in
vividand graphic descriptions. "Chartism," and tive
vividand graphic descriptions. "Chartism," and tive
trom periodical publications, appeared in 1838, and in
the delivered a series of lectures on Marcoworkly.

The maximum number of marks was 120 and the 1840 he delivered a series of lectures on Heroworship, which were afterwards published in a collected form. ilia "Past and Pres-nt" appeared in 1843, "Latterday l'amphiets," essays suggested by the convulsions of 1848—an era which he sales none of the most sine. Charlestown for the purpose of formally passing upon gular, disastrous, amazing, and, on the whole, hus the application of the Rev. Thaddens Salters for desmillating years the European world ever saw," in con's orders. The candidate, who is a colored man, miliating years the European world ever saw," in 1850. His "Life of John Stirling" has been described as 'one of the fluest biographies ever written." In 1845 Mr. Carlyle produced his great work entitled 400,000; then comes France with \$30,700,000,000, "Dilver Cromwell's Letters and Speeches, with the United States with \$32,000,000,000, Germans with Eucldations," which gave him a distinguished place \$22,000,000, Russia with \$15,000,000,000, and the among the historians of the age. On the death of the Earl of Ellesmera, in 1837, Mr. Carlyle was ap-pointed a trustee of the National Portrait Gallery. In 1860-4 he published his "Life of Frederick the Great." Mr Carlyles characteristic," says one of his admirers, "is a rugged carnestness of expression, and s range of thought widened and deepened by his acquaintance with the writings of the great German thinkers Mr. Carlyle, elected Rector of Edinburgh University, November 11, 1865, delivered his inaugural address April 2nd, 1866.

#### SERIOUS ACCIDENT.

According to the Delaware and Accomplation our case is even better. The annual accommulation of wealth in at Chespeako Bay We dust freatly with these the heat year, but did nothing to what we will do this seator. This fish was formerly very are, and we took as a support of the control of th

-Mr. H. A. Fairbank, of Petrella, committed saidle a few days ago at Ann Arbor, Ma b

-James Carolf, tried in connect in with the Baldulph neurders, has been acquitted.

-Michael Davitt, a fending his helard spetator, for loca quested end committed to prison. He was out on to be test-le we

-The Inland flevenne receipte for January amounted to \$4,035.14 and for the corresponding mounts of last port \$6,025 14, an increase of nearly \$2,000.

-- The Porte buls it is a coarry to note rails in a day taxation in order to meet its wants, not a very promis ing situation wie napparently on the even factor with

- At the Hult (En. ) pole co out recently, Thomas Bootheread a lighter-man, was charge I with sunng alling 237 Har of foreign manufactured telescore He was fined \$168 and costs

-Catadian immigration returns of their are substantially as follows - Arrivals era the St. Lawrence, 22,440, from the United States, 47,402; total, 19987. Of these there went to the United States, 47813, to Quebec, 239, to Manitole, 2,552, and remained in Ontario, 19,291. Of those who settled in Ontario 7,989 were English, 4,518 Irish, 3,922 Scotch, 1,997 German, 2,132 Americans, and the balance is made up of different other nationalities. Of the 2.532 who went into Manitoba 500 had through tickets from the Old Country to their destination.

—In Vermont in 1860 there were 94 divorces. In the same State in 1878 there were 107. In New Hampshire the rate had increased from 139 in 1870 to 240 in 1876. In Massachusets the number had increased from 140 in 1870 to 600 in 1878. In Massachusets in 1878 there was I divorce for every 21 8-10 marriages as against 1 divorce to every 41 marriages in 1869. In 1878 2,672 divorces were granted in New England, of which 437 were in Maine, 241 in New

-When it is desired only to ascertain whether olive cil is nure or not without precise reference to the nature of the oils used in adulteration, take equal quantities of silve oil known to be pure and the oil to be tested, place the samples in separate test tubes, into which a good thermonicter may also be inscried, and heat each separately to a temperature of 482 Fah The pure oil will become somewhat paler during the heating, while the adulterated oil will turn darker The pure oil will emit a pleasant smell, while the adulterant oils will give off an offensive odos.

-The Council of the Ontario College of Pharmacy The maximum number of marks was 120 and the winimum 80.

-The Standing Committee of the Episcopal Church for the diocese of South Carelina recently met in stood a creditable examination upon all the canonical requirements before the heard of examiners. The Standing Committee, baving received satisfactory testimonials of the good character of the applicant, signed his papers. Mr. Salters will be the first colored man ever admitted to holy orders in the Episcopai Church in South Carolina.

-The progress of education in Ontario for the ten years 1870-79 has been steady and marked. The number of public schools at the beginning of the decade was 4,666, and at the close 5,123-an incresse of 557. The amount paid for public school teachers' salaries rose from \$1,222,618 to \$2,072.822, and for the erection and repairs of school Louses, fuel and contingencies, from \$489,380 to \$760,262—an increase respectively of \$650,141 and \$270,862. The amount paid for salaries during the decade was \$16.672 173, and for school buildings, fuel and contingencies, \$9,235,860, a total under these two heads of expenditure of \$26,008,. 033. If these figures mean anything, the growing generation can have no reason to complain that their education interests are being neglected.

-The steamer Bolemian, reported to have been wrecked on the Irish coast, was one of the siz steamers of ithe, Leyland line plying between Boston and Liverpool. She was built at Belfast in 1870, and combined speed with a large carrying capacity. She had six water-tight compartments. Her cargo conproduce, embracing corn. hos products. cotton, dairy products, apples, leather and meat. A despatch states that only the second mate and twenty seamen were savel. Among the lost is Commander Grundy. The whole number of persons aboard is cetimated at sixty, among whom were five men in charge of the cattle and refrigerators. The total least of life is about thirty-nine. The steamer was worth baif a millieu, and cargo \$237,000.

-A redistribution of seats may be called for in Great Britain and Ireland. In the United Kingdom there are about 3,000,000 of electors, of whom Scotland had at the last election 306,000, choosing only 60 members, while Ireland and Wales together had 368,000 electors, choosing 133 members. The House of Commons numbers 682 members. This leaves for England 457 members choosen by 2,326,000 electors. London alone has 370,000 electors, or morethan all Scotland, and more than all Ireland and Wales put together. Nevertheless London is allowed only 25 members, whereas, according to the official statistics which have been given, London, under any equality of apportionment, should have se many members as Scotland. If London were represented as Ireland and Wales now are in Parliament it would have 135 members of its own.

-At a recent meeting of the Leith Town Council, Provost Henderson, a propos a memorial from certain inhabitants on numbers said to be caused by the sewer ventilation in the streets, took occasion to address the Council on the principles and practice of newer venti-lation. He described the various means which had been resorted to in different towns to accure ventiletion of the sewers, by in-draughts, by out-draughts, by furnaces, by screws, but thought experience had proved that the aimpier the means adopted the more effectual the result. In fact, the more numerous and more direct the openings made in the sewers the better the ventilation and the less the nuisance (if any) from sewer air. He, as Mr. Littiper with the chimney-cowie and smoke, preferred the ventilation and the means thereof, plain, and this was the general conclusion of competent observers on the subject. If the street ventilators of Leith stink, the evil must be sought not in the ventilators, but in the sewers themselves,

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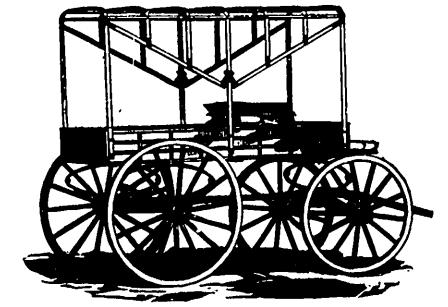
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