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# THE TRADER.

"A Journal devoted to the interests of the Hardware and Jewelry Trades."

VOL. 2.

TORONTO, JULY, 1881.

NO. 11



## WALTHAM WATCHES!



### LEE & CHILLAS,

TORONTO,

## Wholesale Agents FOR Canada

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IN AMERICAN JEWELLERY.

**Tools, Materials, and Diamonds,**

**No. 31 KING ST. EAST, TORONTO,**

## THE TRADER.

TORONTO, ONTARIO, JULY, 1881.

Sent free to every Jeweler and Hardware Merchant in the Dominion of Canada.

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THE TRADER PUBLISHING CO.,

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## GOODS TOO CHEAP.

Goods at less than Cost! Such is very often the bait with which unprincipled dealers, wholesale and retail, attempt to catch their customers, and in a great many cases they effect their object and make people believe that they are mercantile philanthropists, doing business only for the good to the people at large, and not with any view whatever of benefiting themselves. This idea of selling goods at less than cost is a delusion and a snare; it can't be done honestly, except under very exceptional circumstances, and as a rule is seldom done at all.

Whenever a person is offered goods at less than cost of production he may rest assured that there is a screw loose somewhere. Either the goods are not of the quality represented or they have some defect in style or finish.

People don't do business for the fun of the thing, or even to oblige their customers; as a rule they do it to make a living, and a merchant might just as well expect to sell quarter dollars for twenty cents and make money out of the transaction as to make a living by selling goods at less than cost of production. And what is true of the seller is equally true of the buyer, only in the very reverse direction. Any buyer that was offered quarters for twenty cents would either take the person offering such bargains for a fool or test well the coins to see that they were not spurious, as in ninety-nine cases out of one hundred they certainly would be. The principle, however, is the same, whether the articles be goods or money—it don't pay to sell goods at less than cost, therefore it is rarely done with honest goods. There is

hardly any such thing as getting a bargain in the ordinary articles of every day life, and thus it turns out that what appears to be the dearest articles are as a rule the cheapest, because their being higher is a proof of their genuineness.

In this connection we read a very amusing incident the other day which amply illustrates the point we have been writing about:

"A grocer in Janesville wrote to a spice house in this city, wanting to buy some brown pepper at nine cents a pound. Now, pepper costs fifteen cents a pound and the grinding costs two. The cheapest pepper which the Chicago house had was twelve cents a pound. The members of the firm deliberated some little time whether they should throw away the order or get up something to suit the man. Finally, unwilling to lose a customer, they took a little black pepper, considerable buckwheat bran for body, and some cayenne pepper for heat, and made up a mixture that was sent him for sale at nine cents a pound. Now to apply. Honest ground pepper cannot be sold for less than seventeen cents a pound; so if anybody's grocer offers to sell it to him for less than that the purchaser knows that he is not getting a genuine article."

This observation is certainly true about a great many other articles besides pepper in the grocery business, but we don't for a single moment suppose that any person in either the Hardware or Jewelry business would do such a thing, oh, no! There's tricks in all trades but ours, is a common saying, but in spite of all this, we would advise our friends to examine well before purchasing goods below cost.

## THE QUEBEC FIRE.

The old adage that "misfortunes never come singly," has been amply verified this year as far as the Dominion of Canada is concerned. Only last month we had the painful task of recording the horrors of the accident on the river Thames at London; this issue, we have to chronicle the great fire in the City of Quebec, by which some valuable lives were lost, and several thousand people rendered homeless.

Although, neither rivalling in extent nor loss of life the great conflagrations of Chicago, St. John's, or Boston, the late Quebec fire is by far the most destructive that has been recorded for several years

past. From the published accounts it appears that there was a great scarcity of water, and that although the fire brigade of the city nobly did their duty, their efforts were almost fruitless in arresting the progress of the devouring element.

The frequency with which these large fires are occurring should surely be a lesson to those cities whose water supply is hardly sufficient for their ordinary necessities, let alone such a terrible contingency as that which arises when a city is threatened with destruction by the flames. There are two weak points in most of our Canadian villages, towns and cities, to which our attention should be directed in a very practical manner; viz.:—the one indicated above, inadequate water supply, and the danger of having so many wooden buildings congregated in such close proximity as they generally are in our centres of population. In a wooden country such as we inhabit, where the many are obliged to use wood as a building material on account of its cheapness, great care should be taken to avoid the overcrowding of such buildings. Where at all possible, the houses should be built detached and trees planted between them, the streets might be made very much wider than they are at present, say 100 feet, and planted with rows of trees on each side. If these simple expedients were carried out, they would not only form in themselves natural barriers to aid in curtailing fires, but add very much to the health and beauty of any town or village adopting them.

But beyond these things, useful as they are in themselves, every place of any importance ought to have a good supply of water, and some adequate means of applying it when wanted. If such a state of affairs had existed in Quebec, thousands of her citizens would probably have had their homes to-day instead of a few smouldering ashes; but it seems that the city was so badly off for water, that for ordinary domestic purposes only one section could be supplied at a time, the rest being cut entirely off until their turn came.

How the rulers of the city could expect to be safe from such a calamity as has overtaken it in the face of such culpable neglect we cannot see; it is to be hoped, however, that the lesson may not be thrown away upon those who have the controlling of its affairs.

The fate that overtook Quebec and many smaller towns in Canada, is still

in store for such places as neglect to use the precautions that experience and prudence would dictate as being necessary to prevent such calamities. It is only the wise that profit by such lessons, to the unthinking these occurrences serve only for a ten days' wonder, but produce nothing in the way of practical results.

### THE FORTUNE BAY SETTLEMENT.

It is now understood that the British Government have given in to the American claims on behalf of the Fishermen outraged at Fortune Bay, Newfoundland, and have agreed to pay the sum of \$75,000 to settle the affair.

We had hoped that the Gladstone Government would have exhibited just a little firmness in this affair, and have treated this preposterous claim with a firm refusal, but the result clearly shows what has been time and again asserted by Americans themselves in a boasting spirit that whenever England and America have any differences to settle by friendly arbitration, the latter can "draw the wool over their eyes" and beat them every time.

Whether this is because English Statesmen have a profound contempt for the almighty dollar, or that their perceptive faculties are not so clear as those of Brother Jonathan, we are unable to say, the result however is invariably the same, viz: that either the English taxpayers have to pay for their leaders' stupidity or want of tact, or the Canadian Colonist has to foot the bill. In either case the receipt of payment is generally accompanied by some self satisfied utterances of the great American Nation over the effete and decaying people of the Old World.

Now in these transactions we do not think that the American people or their representatives are to blame; the real fault rests with the representatives of our own nation who are either ignorant of the rights of their Colonial dependencies or are willing to make them a makeweight in effecting imperial negotiations.

In this Fortune Bay affair, or 'outrage' as the papers across the line grandiloquently term it, American fishermen were presuming to do what the Newfoundland fishermen were by their own local laws prevented from doing, viz. fishing on the Sabbath. The American fishermen were asked to desist from

breaking these local laws but refused, whereupon these Newfoundland fishermen took the law into their own hands and drove them off. In doing so they spoiled a few hundred dollars' worth of nets, and deprived these innocent Americans of the pleasure and profit of breaking the Lord's day. Could ignorance go further than this? It is quite evident by the American claim and the English payment of it, that the representatives of these two countries thought about alike on this subject.

There is a principle involved in this award, however, which we have not yet heard the end of, and we very much fear that it may crop up unpleasantly when we least expect it.

If the American Government were right in demanding, and the British Government in paying this award, then we think it pretty clearly establishes the point, that in the opinion of the two high contracting powers, our local Canadian Laws are in no way binding upon our American cousins, but that in all matters of dispute they can be a law unto themselves.

In the present instance the Yankee fishermen claim the right under the treaty to fish on Sunday, a privilege that the native Newfoundland fishermen were debarred from exercising, and for the breach of which they would have been punished by their own laws.

It seems highly unfair that a foreigner should be allowed to break a law with impunity, for which a native would be severely punished did he attempt to do likewise, but what are we to think when a foreigner not only breaks the law, but claims and actually gets damages because an attempt was made (illegal we grant) to make him do what the law proclaimed to be right. As we said before, a more stupid piece of blundering on the part of the British Government has rarely happened, and the probability is that this very award will encourage these cheeky American fishermen to further acts of law breaking, in the hopes that they may again be interfered with as before.

Yankee fishermen are shrewd enough to know that as long as John Bull will shell out, being driven off their neighbours' fishing ground for breaking the Sunday laws and getting \$75,000 compensation for it, will pay them very much better than staying there and legitimately catching fish on week days. If it won't, then the fishery rights are indeed much more

valuable than we had imagined or they had tried to make us believe, and if this award be taken as any criterion of value, the privilege of fishing in Canadian waters will be a much more expensive luxury when the treaty comes to be renewed.

There is one lesson that suggests itself very strongly as we consider this discreditable affair, and that is that in all negotiations with other nations the interest of the Colonies are nowhere when any Imperial consideration comes in conflict with them. In nearly every instance where there was a dispute between Canada and the United States, Canadian interests have been systematically ignored or thrown in as a make weight in order to obtain a better bargain for England herself. What we want now, and must have before long is the right to make our own treaties and conduct our own negotiations. Events have already shown pretty conclusively that although English Statesmen are no match for American diplomacy, our Canadian Politicians are more than equal to the task of maintaining the country's honor and defending its rights. In the only instance they ever had of managing their own diplomatic affairs, viz., the Fishery award, our Canadian representatives acquitted themselves so well that our American Cousins have never since ceased to grumble, and this Fortune Bay "outrage" claim is only another way of trying to get even with us on that score.

If it is impossible for us to control our own treaties and negotiations as long as we remain a Colony, then the sooner that we become an independent nation the better for us, for it would be utter folly for us to sit quietly by with folded hands and see our interests over-ridden on one hand or entirely ignored on the other.

We are no advocates of independence for its own sake, for we would prefer to remain with the Mother Country as long as possible, but we cannot allow ourselves to be made a cat's paw of, in order that the imperial chestnuts may be safely brought out of the fire. The sooner that the British Government understands that Canada is not only competent but willing to manage her own affairs, and give her the power to do so, the better it will be for the feeling of friendship between the two countries, for it is quite evident that the popular feeling, that Canadian interests are paramount to all others in Canada, is rapidly gaining ground in this country.

**WELLAND VS. ERIE.**

There can be no doubt whatever, that the enlargement of the Welland Canal marks a new era in the history of the Canadian carrying trade. Hitherto, on account of the lack of proper canal accommodation, we have been compelled to content ourselves with the overflow of a trade, of which our American competitors enjoyed an almost virtual monopoly. The enlargement of the Welland Canal, however, has put an entirely new face on this question, and if we take the full advantage of our new facilities will enable us to compete with our rivals on more than equal terms. Bad as the Erie Canal (or ditch as its American opponents term it) is, experience has fully demonstrated its superiority as a means of cheap transportation over its more rapid rivals, the railroads. This being the case, it is no wonder that this water route has been tested to its utmost capacity, by carrying, for the past few years, every bushel of grain that its lockage accommodation would allow it to take. This being the case, it is evident that the only thing that can make it a more formidable competitor of our Welland route, would be to enlarge its locks or raise its banks so as to give it a greater depth of water.

The enlargement of the locks is regarded by one and all as entirely out of the question, on account of their massive structure and great cost; while the deepening of the water way can only be effected by raising the banks, which, as every one knows, would be a very costly and tedious process. In the meantime, the people of New York are clamouring to have it made a free canal, by removing all the tolls, an idea, which, although cheapening the cost of carrying what grain does pass through, cannot in any way add to its present capacity. If the State of New York were not only to make it free but to give a bonus of ten cents per bushel for all the grain shipped by this route, it is evident that it would not materially affect the prospects of our canal, because, although it is now carrying up to its full capacity, it does not move more than one-third of the western grain that finds its way to the seaboard.

This being the case, we think our chances of capturing the carrying trade of the northern part of this continent, is greatly increased, because, even if the Erie Canal should always be worked up to its full capacity, that capacity is small and constantly decreasing when compared

to the bulk of the grain that has annually to be moved. In other words, after a certain point has been passed, the Erie Canal ceases to be a rival altogether, so that we shall really have the lion's share of the trade, if we only possess sufficient enterprise to enable us to utilize our geographical advantages.

So far as these competing routes are concerned, every one is probably aware that from Chicago to Buffalo, they are identical; from Buffalo to Albany, 3-15 miles, the Erie route is composed of the Erie Canal, with its seventy-two locks, and from thence to New York, 150 miles, it consists of the Hudson River. The boats or scows which carry grain from Buffalo to New York, take on an average about 7,000 bushels, and cost from \$8,000 to \$8,500 each.

By the Welland route, the grain is conveyed without breaking bulk through the new Welland Canal and Lake Ontario, as far as Kingston, where it has to be transhipped and carried either in barges or propellers small enough to pass through the locks of the St. Lawrence Canals.

At Port Colborne, as the route stands at present, the eastward-bound vessel is 365½ miles from Montreal, of which distance 70½ miles is canal and the remaining 294½ miles is open lake and river navigation. In the 70½ miles of canal navigation there are 54 locks.

The weak part of our route, so far as we can see, is the canal system between Kingston and Montreal, and if our Government ever intend us to reap the full advantage of our expenditure on the Welland Canal, they should at once commence the work of enlarging the St. Lawrence Canals, so as to admit of their passing the same sized vessels through to the tide water without lightening.

At the present time it is cheaper to unload large vessels at Kingston, and convey the cargoes to Montreal in barges, then to lighten them and take the balance of the cargo through in the same vessel.

If the delay and drawbacks of this part of the route could be overcome, it would cheapen the transportation very much. In the meantime, however, steps should be taken to provide sufficient elevator accommodation at Kingston, so as to put our route on a par with the Erie route in this respect.

Once in Montreal or Quebec our route has a decided advantage over the Erie route in point of distance, as Montreal is nearly 500 miles nearer Liverpool than

New York, and if the abuses in towage, pilotage, harbour dues, &c., could be swept away, it would soon bring our ocean freights down to as low a rate as from any port in the United States.

Comparing the rival routes as they stand at present, we find that the cost of transportation might be calculated as follows:

ST. LAWRENCE ROUTE.		
	Cost per bush.	Time.
Chicago to Kingston, by steam barge and towing consort (old canal size).....	4c.	7 days.
Kingston to Montreal, by river barges.....	2½c.	3 days.
Total, Chicago to Montreal.....	7c.	10 days.
ERIE CANAL ROUTE.		
Chicago to Buffalo, by barge, steam barge, and towing consort (now canal size).....	1½c.	5 days.
Buffalo to New York, via Erie Canal.....	5c.	14 days.
Total, Chicago to New York.....	6½c.	19 days.

This gives us nine days' advantage in point of time, and only half a cent against our route as to cost. This is what can be done with our present canal capacity, provided proper facilities are provided for transport on the upper St. Lawrence, and if that portion of the route could be made to keep pace with the Chicago and Kingston portion it is almost certain that the opening of the new Welland Canal could be made to reduce the cost of transport from Chicago to Montreal to about six cents. The enlarging of the St. Lawrence canals would, it is thought, enable shippers to move cargoes of grain from Chicago to Montreal in FROM EIGHT TO TEN DAYS, at a cost NOT TO EXCEED FOUR AND A HALF CENTS PER BUSHEL. This, it will be observed, will give us the advantage over our neighbours of two cents per bushel, and from nine to twelve days in moving a cargo of grain from Chicago to the seaboard.

**Selected Matter.**

**HOROLOGY IN SWITZERLAND, FRANCE AND AMERICA.**

Mr. Henry Ganney, in a recent paper read at the Horological Institute, London, on the practical value of Horological Schools, and their work at the Paris Exhibition of 1878, furnished some very interesting information. Mr. Ganney was one of the British representatives of horology at that exhibition, and he had, previously, carefully investigated the American system of Watchmaking, and advocated its introduction into England. Of the exhibit of Great Britain, at Paris, he said:

And I may say in passing, that the display of English watchmakers at the

Paris Exhibition was with one exception so poor, and consisted in many instances of foreign work, that I should prefer the title of "Anglo-American watchmaker," kindly bestowed on me by a gentleman in this room some years ago, when the merits of the American system were treated as a good joke, and our facts as travelers' stories. But, with our own trade stagnant, the question arises, should not English watchmaking be protected from its friends? And why cannot that which flourishes so well at Besancon, in France, under the shadow of Bunker's Hill, and in the mountains of Switzerland, be allowed to expand in its most favoured home—Clerkenwell—with the fostering care of a Horological Institute? Horological schools may be viewed more as a product of horological success than a cause of it, though doubtless tending to maintain success. By success I mean commercial success, as the most successful schools are maintained where the manufacture flourishes most vigorously, and there the schools are best attended. Geneva, which once boasted the best Horological schools, has been surpassed by Locle, which, once despised, now remains the most active centre of horological productions in Switzerland. The most interesting and novel feature connected with my labors, as reporter for the Society of Arts at the Paris Exhibition, was the examination of the work exhibited by the various horological schools of the Swiss, and more particularly the French school of Besancon, which, being only a few years in existence, had made a special effort to give a good account of itself at the Paris Exhibition. Schools of greater age, and perhaps equal merit, belonging to the Swiss, were there; and, if we are to judge by the work shown, surpassing, in the ability of its pupils, anything Besancon could show, as much of the very best work in the Swiss department was the product of the horological schools, and comprised every class of work, from movements to *fac-simile* English chronometers; and it was difficult to believe one was not looking at work produced in Clerkenwell. At previous exhibitions of continental work I had witnessed, the usual characteristics of foreign work had always been apparent; but in much that I saw it was evident that Swiss workmen had traveled and worked abroad with advantage to their native land; and I saw what appeared to be imitations or reproductions of English and American chronometers and watches,

that not only possessed all the merits of the originals, but, in many instances, surpassed them. It was not claimed for the Swiss schools that the exhibited work was produced by youths who had been entirely trained by the schools, it being in most cases the work of mature hands, who, in the various schools, received the highest practical and theoretical training in addition to what they had acquired as ordinary apprentices or workmen elsewhere.

France, too, has shown great activity in promoting the art of horology in technical schools. That at Besancon is a municipal institution, maintained by the tax-payers. It employs one director, three teachers of the theory of the art, two professors of drawing, and six practical teachers, and contained, in 1880, eighty pupils. The watch manufacture in France has made wonderful strides during the past twenty years, and, like that of America, may be said to have risen from nothing to an important manufacture within the last few years, despite the fact that watchmakers paid, in 1876, nearly a million of francs in taxes to the Government, for stamping the gold and silver cases, of which none are allowed to be made without the stamp or hall-mark. But the manufacturer is protected on his goods by the requirement excluding all foreign cases that have not been hall-marked in France, and, in addition, five francs duty is required on all foreign movements. In the town of Besancon, 16,000 operatives live by the art of watch making and, in the department, over, 40,000 people work at watch and clock making. Formerly, Switzerland sent watches to the value of over 4,000,000 francs a year to France; of late years this trade is changed, and France now exports large numbers of watches to Switzerland. The annual value of horological productions in Besancon and the surrounding districts, is estimated at 25,000,000 francs. The value of the entire clock and watch trades of France was estimated at 57,000,000 francs for the year 1880.

The work done in the French school is the property of the pupil or of his parents, and sells, for its market value, paying more than the cost of the education, if the pupil is clever. The fees are only five francs per month for natives, and twenty francs for foreigners. The work of six pupils between the ages of sixteen and eighteen was exhibited. They had been at the institution from two and a half to three years, and had taken prizes

and medals given to encourage pupils during their terms.

In addition to drawings and models, about fifty watch movements, in various stages of completion, and the majority of them nearly finished, all of their work amply prove these pupils' industry and ability.

Few adult workmen would turn out as much work in the same time, all by their own hands; and I doubt very much if the English trade contains any workman, taught in England, who would undertake to produce such a variety of work of equal excellence. A maker of repeating movements has not yet been known in England for the last fifty years, at about the beginning of which time that branch of industry died out here. The practice now is to import that class of work from abroad, and to finish it by addition of the ordinary going train of our own style of work. The best piece of work of one pupil about seventeen years of age is a fusee keyless pocket chronometer, finished and full jeweled, and ready for the hair-spring. A still more complicated piece of most beautiful work is his keyless repeater lever, finished and full jeweled; and a keyless lever, with Breguet spring, showed that springing is by no means neglected, though in the springing no special excellence was instanced, or could, indeed, be looked for from one so young; the wonder was how so much skill could have been acquired in so short a time as about thirty-four months. As many years might have been deemed a reasonable time to learn so much. This seems to indicate some special system of correcting the work of pupils, or possibly they may copy good models without thoroughly understanding them. Long apprenticeships are served in England, and then only a limited part of the branch of the work, such, for instance, as escapement making, is understood and effectually mastered by the workman.

Although the practical skill is there, in these pupils and in their work, theoretical comprehension of it can only come through such study and practice. Correct testing or sizing of parts is beyond the power of any tools known outside the watch factories of America and Switzerland.

The Besancon manufactories and schools place all their reliance on skilled hand-work, and have given no attention to watchmaking by machinery, though the subject is beginning to force itself on their notice, as, in face of the keen com-

petition between the horological centers of production, Switzerland, America, France and England, supremacy will rest with those who use the best machinery, much as in war, those who have the heaviest artillery are supposed to be the special favorites of fortune, provided, of course all other things are equal. The Besancon puppi, in addition to jewelng the holes and the escape pallets, after drawing the angles on the steel, and filing them out, makes his own jewel holes. This is very surprising, because a good jeweler is not necessarily a jewel-hole maker. The two operations belong to distinct branches, hole making and setting being the business of a worker in brass.

A personal interview with this prodigy of skill entirely confirmed the statements which had been made. He informed me that his father and family were jewel-hole makers, and that he had worked at that process a little before going to the school, and that after school hours he worked overtime in making jewel-holes, which he would be happy to supply me with, as he had a considerable stock by him; and he inquired as to the probabilities of obtaining work in London, as other watchmaker or jewel-hole maker; he was not particular as to which, as he wished to visit London, and learn our language and ways. His simple peasant appearance, in his clean, rough-boiled blouse, gave little promise of the skill he actually possessed, but patience was written all over him, and the frontal development of the organs of comparison indicated great brain-power.

**THE WATCH COMPETITION AT MELBOURNE.**

The Swiss Government has caused to be published a statement of the results of the competitive tests of watchmaking at the Melbourne Universal Exhibition, which we translate from the *Journal de Genève* of April 27th. This statement, it will be seen, bears the signature of the President of the Swiss Commission for the Exhibition, and is in reply to the claim of the Waltham Watch Company, as given by a correspondent in last month's WATCHMAKER AND METALWORKER, that it had carried off the first prize at Melbourne. Only desiring that the truth shall appear, we shall await with interest the settlement of this question in accordance with the facts:

"In face of the dishonest or unjust

statements of foreign rivals or competitors, as to the result obtained by watchmaking at the Universal Exhibition of Melbourne, we think it our duty to place before the public the list, by order of merit of the watches which have undergone, at the observatory of that town, the examination (or trial) to which the jury thought fit to submit them. Exhibitors were not allowed to deposit more than six watches each.

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6 Unknown . . . . .	475 "
7 Lange (Germany) . . . . .	470 "
8 Swiss (Collective Exhibit) . . . . .	465 "
9 Bukney (England) . . . . .	460 "
10 Swiss (Collective Exhibit) . . . . .	455 "
11 Kullberg (England) . . . . .	450 "
12 Swiss (Collective Exhibit) . . . . .	445 "
13 Bukney (England) . . . . .	440 "
14 Lange (Germany) . . . . .	435 "
15 Waltham (America) . . . . .	430 "
16 Kilpatrick (England) . . . . .	425 "
17 Waltham (America) . . . . .	420 "
18 Nicole, Nielsen & Co. (England) . . . . .	415 "
19 Lange (Germany) . . . . .	410 "
20 Kullberg (England) . . . . .	405 "
21 Nicole, Nielsen & Co. England. . . . .	400 "
25 Waltham (America) . . . . .	395 "
28 Waltham (America) . . . . .	390 "
33 Waltham (America) . . . . .	385 "
36 Waltham (America) . . . . .	380 "

This table renders comment unnecessary; it is sufficient to show that the best American watch occupies the fifteenth rank; or the third rank after or below the last Swiss watch.

The result of this competition by trial, combined with those furnished by the examination of the products by the jury, has been to award the Swiss a total of 908 points—a higher figure than that of any exhibitor whatsoever.

This award has been granted not only to the exhibitors whose watches at the Astronomical Observatory of Melbourne were all cheaper than the American watches, but to all the Swiss manufacturers of watches whose products were exhibited collectively at Melbourne.

Knowing the above, what ought we to think of the American publications announcing that the Waltham Company had obtained a new or a fresh victory over its rivals?

THE PRESIDENT OF THE FEDERAL SWISS COMMISSION FOR THE EXHIBITION AT MELBOURNE.

COMTESSE, Counselor of State.  
NEUCHÂTEL, April, 1881.

**WHAT IS NICKEL?**

Since the convenient five-cent coin which in common talk is called "a nickel" has come into general circulation, the question is asked either mentally or orally hundreds of times every day, and but few get an intelligent answer. In China and India, a white copper, called pack tong, has long been known, and has been extensively used both there and in Europe for counterfeiting silver coin. About the year 1700 a peculiar ore was discovered in the copper mines of Saxony, which had the appearance of being very rich, but in smelting it yielded no copper, and the miners called it *kupfer nickel*, or *false copper*. In 1751, Constadt announced the discovery of a new metal in *kupfer-nickel*, to which he gave the name of nickel. It was in combination with arsenic, from which he could relieve it only in parts. The alloy or nickel and arsenic which he obtained was white, brittle and very hard, and had a melting-point nearly as high as cast-iron. It was not until 1823 that pure nickel was obtained by analysis of German silver, which had for a number of years been produced at Suhl, in Saxony. Its composition was ascertained to be copper 10 parts, zinc 5, and nickel 4. If more nickel be used the alloy is as white as silver and susceptible of a very high polish, but becomes too brittle and hard to be hammered or rolled, and can be worked only by casting. Pure nickel is a white metal which tarnishes readily in the air. Unlike silver, it is not acted on by the vapor and sulphur, and even the strong mineral acids attract it but slightly. Nickel has the hardness of iron, and, like it, has strong magnetic properties, but cannot be welded, and is soldered with difficulty. Pure nickel has heretofore been used chiefly for plating, for which purpose its hardness and power to resist atmospheric influences admirably adapt it. Within the last year the French have succeeded in rolling the metals into plates, from which spoons and other table furniture may be pressed. Nickel bronze, which consists of equal parts of copper and nickel, with a little tin, may be cast into very delicate forms, and is susceptible of a very high polish. Mines of nickel are worked at Chatham, Conn., and Lancaster, Pa., and it is said to be found at Mine Le Motto, Mo., and at several points in Colorado and New Mexico, where but little attention is paid to it. It is extensively mined in Saxony



and Sweden, but the late discovery of a new ore (a silicate of nickel) in New Caledonia will probably suspend the use of the arsenical ores, and yet bring nickel into common use. Switzerland, in the year 1862, made a coin of German silver, which is identical in composition with our nickel coin. The United States made nickel cents in 1850, and eight years later coined the five-cent pieces. Belgium adopted nickel coinage in 1860, and Germany in 1873. England has lately coined pennies for Jamaica, but at home she and France adhere to the clumsy copper small change.—*Exchange.*

### STORY OF AN AMATEUR CLOCK MAKER.

A story which points its own moral is being told of a well-known citizen who came limping into one of our jewelry stores the other day with a water pail in his hand containing the demoralized remains of an eight day clock. The jeweler had the curiosity to inquire how the thing got so badly mixed, and after a little hesitation the victim told his story. "You see, last Sunday morning this confounded clock stopped, and I wound away at it for some 15 minutes, thinking it might have run down a little before the usual hour, but 'twouldn't go, and during the afternoon I got to thinking it over and quietly trade up my mind when wife went to church in the evening that I'd look the thing over and save paying out a dollar or two for repairs. I got so impatient to begin work that it seemed as though Sarah would never start for her prayer-meetin', but at last she did, and no sooner was she out of the house than I began operations. I got a small table, took down the clock, removed the works and then began taking out the screws that held it together. As I loosened the last one there was a sudden whizz, bur-r-r, whizz, and for an instant I saw wheels and springs firing all about and felt something sharp strike me in the face. Instantly followed a crash of glass, and then all was darkness. My first thoughts were of a nitro-glycerine explosion and that some one mistook me for the Czar of Russia; next of an earthquake, and I tremblingly awaited the crumbling in of the house. At length I mustered courage to grope about for a match, and while doing it out my foot on a piece of the lamp and crushed one of the clock wheels out of shape. When at last I got a light and looked round on the havoc caused by

that dod-rotted eight-day spring, the room appeared as though a land-league meeting had been held there and some disputed question of parliamentary law had arisen to be settled after a free fight. All round were scattered pieces of the confounded clock, the oil from the broken lamp was soaking into the carpet, the table was smashed and I bleeding from the face and foot. I grabbed the first thing within reach to wipe the blood from my person, and soak the oil from the carpet, only to discover afterward in a lengthy curtain lecture on wickedness in general and mine in particular, that the article used for a handkerchief and mop was my wife's precious 'tidy.' Then I got a broom, dust pan and water-pail and swept up the remains of that clock, and here they are. You can sort 'em out and put 'em together if you like, it 'twon't cost more than the clock did, and if ever you hear of my fooling round with the spring of an eight-day clock on a Sunday night, or any other time, you may book me for an idiot. I'd rather tackle a can of dynamite with a hammer.

### THE QUESTION OF CREDIT.

The value of good credit is beyond estimation in dollars and cents. To a business man it serves the purpose of a part of his capital and, in some instances, it bridges him over difficulties where money would not avail to save him. No good business man, be he rich or poor, will hold his credit in light esteem. The better the business man, the higher does he prize his good name and his good commercial standing. Reputation has been the stepping stone to many and many a man's fortune. Instances are innumerable where young men and old men too, have been put upon their feet and upheld in business by those having money, simply because the latter had faith in the honesty and integrity of the former and his possession of the necessary business education to warrant his ultimate success. Large firms have been wrecked by reason of their loss of it. A suspicion once gaining ground against the reputation of a firm is likely to embarrass them in all their after business operations. The lines of credit run through all trades, from the producer down through the jobbers to the retailer, and from him to the consumer. Thus the article manufactured is generally sold to the wholesale dealer, on a longer or shorter credit, who in turn sells it to the retailer on time, and he to his cus-

tomers on credit. Business thus rests upon the foundation of mutual credit. But, strange to say, there are plenty of dealers who seem to have a reckless disregard for their good standing in the trade. Most of them court bad reputation by being slow and careless in the method of meeting their engagements. This is more likely to be true with the smaller than with the larger dealers, but it is true of too many large ones. The trouble is that many dealers think that, because they have assets enough to cover their liabilities, that there is no occasion for their creditors fretting, if they do let their bills run over time before paying them. Some seem to think that as they have a good standing at home that is sufficient. They feel that the jobber ought to know all about them, and that as long as they are not bankrupt, it makes no difference whether they keep their business engagements or not. They forget that the business of the wholesale dealer is run on system, and that perhaps he has a list of from 8,000 to 10,000 customers on his books, and that he judges their credit and standing very much from the promptness they display in paying their bills. It is a suspicious circumstance to find a dealer always behind in keeping his engagements. He ceases to be looked upon as a desirable customer. The salesman, not over-anxious to retain his patronage, is inclined to be less accommodating in cutting prices, and before the dealer is aware of it, he has lost ground and standing with the wholesale trade, or with the manufacturer, if he deals with firsthands.—*American Journal of Industry.*

### CONCERNING GOLD.

Mr. Richard B. Kimball, LL. D., lectured before the Washington Heights Century Club last evening, in the Presbyterian Church, Carmanville, on the subject of "Gold." Commencing with the references made to the metal in the second chapter of Genesis, the first record of creation, the lecturer spoke of the qualities of gold, and traced its history through the later books of the Bible down to the present day. It is emblematical of virtue honesty and beauty. It is the only certain measure of value, because it is value, in itself. In the Book of Job so perfect a description of mining is given that a Californian miner would readily recognize the drift, the tunnel and shaft. Solomon was successful as a gold miner. The Greeks and Romans were fully alive

to its value. In the Middle Ages, when search was made for the philosopher's stone, which was to do away with the trouble of digging for gold, the quantity of coin actually decreased to about \$100,000,000 of our money. When the world breathed free again, and Venice sprang into a glorious commercial life, America was discovered, and the mines of South America and Mexico added in half a century \$1,000,000,000 to the circulation of the world. When America began to develop, croakers began to be alarmed and asked, "What shall we do? There is not coin enough for the world's business." Just then in the remote wilds of California, a little daughter of a millwright, while playing in a dam attached to Captain Sutter's sawmill, came to her father and exclaimed, "What a pretty stone!" It was a nugget of gold. We all know what followed. Australia was next in gold producing; then came Nevada, Colorado and Arizona, until now we have eight or ten States producing enough for all the world. Mr. Kimball closed by explaining the term "specie payments." It does not mean that for all I buy I receive specie and for all I sell I get specie. There is not gold and silver enough in all the world to transact the world's business for a single day. But it means that in settling the balances in commercial business throughout the world as well as between man and man specie must be employed, and a nation which disregards this rule sinks inevitably into discredit and disgrace.—*New York Herald.*

### "SOLDERING AND MELTING."

BY H. BUSH, HULL, ENGLAND.

To hard-solder gold, silver, or other metal articles which have previously been soft-soldered, or to melt old gold or silver for re-working, it is absolutely necessary most carefully to remove even the smallest traces of soft-solder from the articles, as heat requisite for hard-soldering would burn the soft-solder into the articles, and occasion irreparable blemishes, and in melting would make the gold or silver brittle and unworkable.

It is, however, not always an easy task to entirely remove the soft-solder by mechanical means, such as scraping, filing, cutting, etc., especially when the solder has run into hollows, interstices, engraving or chasings, to which places it is very difficult to get at with ordinary tools, and in these instances the applica-

tion of the following manipulation will be of good service.

The article to be cleaned is first of all carefully heated over the flame of a lamp until the solder gets fused, when as much as possible is brushed off with a stiff tooth brush; the heating and brushing to be repeated until no more solder can be removed by brushing; the articles are then placed into a heated solution of the following compositions, which will dissolve all the remaining solder: Two ounces of sulphate of iron and one ounce of saltpetre are pounded to fine powder and boiled in a cast iron vessel in 10 ounces of water, the boiling to be kept up until the fourth part of the solution has evaporated. The vessel is then set aside for cooling, when most of the solution will turn into crystals; after two or three hours the remaining solution not yet crystalized is poured off, boiled again and set by for crystalizing, and this process to be repeated until all the solution is thus disposed of. The crystals are then dissolved in muriatic acid, in the proportion of one part of crystals to eight parts of acid; of this solution is one part diluted with four parts of water, heated, and the articles to be cleansed immersed therein, when all the solder will dissolve without injuring or discoloring the most delicate piece of work.

### CASH VERSUS CREDIT.

The *Detroit Free Press* is noted for its wit. It will in future be noted for its good sense. "Any retail dealer can buy closer with cash than with credit," says our contemporary. "The closer he buys the greater are his profits. Money put down on his counter gives him a chance to discount his paper, meet his notes and pay current expenses. Charge on the book means cash next month, or the month after, or next year. Cash asks no favours except to be waited upon, Credit must have a book-keeper, a collector and a lawyer. If a retail dealer in groceries asks the price of starch, he is told that he can have it at so much credit, or so much spot cash. If a consumer asks the price of a retailer, it is one price to Cash Down or to Dead Beat. The more one thinks this matter over the more he realizes the force of the remark of a prominent western financier, who lately observed: 'The man who pays cash when he can get credit is a fool.' And so say we all. If Dead Beat is to have the

same price as Cash Down, with the additional advantage of sixty days' time—which means ninety in nineteen cases out of twenty—why do any of us pay cash? Why not all take credit?"

### BUSINESS CHANGES FOR JUNE.

E. H. Cadow, Jeweler, Toronto, giving up business. J. & J. Taylor, Safe Manufacturers, Toronto, Thos Saunders, dead, J. Hawke & Co., Hardware, Drayton, Ont., dissolved, George Swan retiring; Daniels & May, Hardware, Bracebridge, Ont., dissolved; C. W. M. Hughan, Jeweler, Bowmanville, sold out by Sheriff, Wilson & Pugh, Hardware and Tins, Cornwall, Ont., assigned; John Segsworth & Co., Wholesale Jewelers, Toronto, dissolved, M. Saunders retiring, style unchanged; A. M. Stephens & Co., Hardware, Owen Sound, dissolved, W. B. Stephens continues; B. & S. H. Thompson, Wholesale Hardware, Montreal, Mr Benjamin Thompson, dead, Toronto Notion House Co, Fancy Goods, Toronto, dissolved and out of business; T. G. & C. S. Gillespie, Hardware, Campbellford, dissolved, C. S., continues alone, James E. Ellis & Co., Jewelers, Toronto, J. E. Ellis, Sr., retires from the business, Bond & Co., Hardware, Halifax, N. S., assigned to J C Mackintosh, E. A Kemp, Hardware & Tins, Creemore, advertises business for sale.

### NOTES AND COMMENTS.

WILSON & PUGH, tinsmiths, of Cornwall, only about a year in business, have assigned. Cause, want of capital and capacity. Liabilities small, about \$700.

MONTREAL journals announce the death in Birmingham, on the 24th ult. in his 61st year, of Mr. Benjamin Thompson, of the well-known Montreal firm B. & S. H. Thompson.

THREE hundred hands are now employed at the Ontario Car shops in London, a larger number than for several years. So many orders has the company that the men are working over-time to complete them.

FRANCE and England do not look as if they were making much progress in negotiating a new commercial treaty. First England made proposals which France rejected, and then the counter-proposals of France were rejected by England. Whether any terms of accommodation will be found seems at present doubtful.

MESSRS. C. G. COBBAN & Co., in this city, manufacturers of mouldings, etc., who suspended payment some weeks ago, have completed an arrangement with their creditors, and an outside party has put additional capital into the concern which will in future be carried on, we trust successfully, under the style of the Cobban Manufacturing Company.

THE necessary buildings required for the manufacturing of glass in Napanee are in course of construction and are to cover 20,700 square feet. Besides a barn and several workmen's cottages, there will be four buildings; 105 feet by 65; 80 by 40; 36 by 40; and 36 by 24; mostly two stories high, and offices 20x28 feet. An artesian well is to be sunk on the property.

## NOTES—Continued.

We were sorry to hear that Mr. L. A. Atkinson, Jeweler of Newmarket, had lost his little girl a few days ago. We offer the bereaved parents our sympathy.

No man can retain his self-respect who has to Lutton up his coat to conceal his lack of a shirt. Such is the deliberate opinion of a Western exchange. If every tramp could be habited in a clean shirt and be induced to wear it, tramping would disappear from the face of the earth.

To make a gallon of silver-plating solution.—Dissolve 5½ oz. pure nitrate of silver, and 8oz. pure cyanide of potassium in 1 gallon of soft water. To make a gallon of nickel-plating solution.—Dissolve three-quarter lb. of the double sulphate of nickel and ammonia in a gallon of soft water.

A STRUGGLING man said to his debtor: "Brown, I want those two dollars you borrowed of me very badly." "All right," was the placid answer, "if you must have them I'll try to pay them in some shape or other." "You will oblige me," continued the first speaker, "by making it as much in the shape of two dollars as possible."

THERE have been 1,574 miles of new railroad built thus far this year, in the United States, against 1,590 miles reported at the corresponding time in 1880. So says the *Railroad Gazette*, which gives the miles of new roads at mid-June as 661 miles in 1879, 413 miles in 1878, 570 miles in 1877, 628 miles in 1876, 296 miles in 1875, 537 miles in 1873, and 1,171 miles in 1873.

At a meeting yesterday of the Ottawa Treasury Board it was decided that the valuation of the Chaudier bridge as fixed by the arbitrators was fair, and that the extra duty and the fine imposed by the Customs department for undervaluations must be paid in full by the importers, Messrs. Clark, Reeves & Co., of Philadelphia, a conclusion in which we entirely concur.

MR. W. H. MARSH, proprietor of the Belleville street railway, has not found that enterprise profitable, and consequently has become involved in difficulties. The mortgagees of the road are determined to close it. Mr. Marsh invested \$8,000, and now offers to sell for \$5,000. Some negotiations were made in reference to removing the rails and plant to Winnipeg, but these appear to have fallen through.

A GENERAL store keeper named John B. Tindal was burned out at Ethel, in the county of Huron, in April last, having \$1,000 insurance, while he owed \$1,400. He was suddenly missing about the Queen's Birthday, having in the meantime collected outstandings to the amount of \$900, and is supposed to be in the States. The inference is that he leaves the insurance money for his creditors.

MR. J. H. HANSON, of Park Hill, appears to have an indulgent mother-in-law. It is said that she assisted him largely in purchasing the fancy goods stock of one McNeil, in the summer of 1879. For this stock he paid too much, and since then his business has been heavily weighted. A short time ago he called a meeting of creditors and after explaining his unfortunate condition he offered to compromise liabilities of \$24,000 at thirty per cent. This is believed to be all he can afford to pay, and it is likely to be accepted.

In 1866 the Chicago, Rock Island & Pacific Railway company laid, as an experiment, some 2,000 hemlock ties that had been saturated with chloride of zinc, in the road bed of the main line at Englewood, near Chicago. A short time ago these ties were taken up and examined. Some of them were in a good state of preservation, while others were somewhat decayed on the surface though sound in the centre. Oak ties laid in 1873 were found to be very much decayed.

THE tower clock of the First Presbyterian Church, Newark, N. J., lately stopped. The town time-keeper found in the walls of the clock a tangled mass of hay, twine, grass, cotton, and feathers amounting to nearly half a peck. A pair of birds had entered the tower through a hole in the dial and attempted to build a nest in the machinery of the clock. The slow revolution of the wheels tore their work to pieces, and they kept on reconstructing it until they stopped the wheels.

SHEFFIELD Trade with the United States.—The total value of Sheffield exports to the United States during the quarter ending March last was 281,326*l.*, as compared with 232,498*l.* in the corresponding period of last year. This shows an increase of 48,833*l.* on the previous year. The particulars for the month just closed exhibit a falling-off of 7,588*l.* in steel and 3,104*l.* in cutlery, as against the same month last year. On the other hand, the total exports show an increase of 19,000*l.*

WHEN it is a standup fight between the C.P.R. locomotive and the tall prairie grass the iron horse generally gets the best of the contest; but when the grass lies down to it the steam engine must throw up the sponge. West of Winnipeg the ties are laid right on the sod, and in many places there is very little ballasting, and in others none at all. The grass has grown luxuriantly, and the other day the wind and rain beat it down on the rails, and the train was delayed some hours in consequence. On the next run the engine came to a dead stop, and the officials had to climb out and parley with the obstruction, which resulted in their leaving one-half the train behind.

AT the last meeting of the New York Academy of Sciences, Mr. G. F. Kunz read a short paper upon the new mineral "hiddenite," discovered not long ago in North Carolina by Mr. Wm. E. Hidden, mineralogist. The mineral constitutes a new gem, of the emerald class, and is known in the trade as lithia-emerald, owing to the presence of lithia as one of its chemical constituents. We (*Scientific American*) have seen some specimens of this gem, and they are indeed most beautiful objects to the eye. The stone has a pure, delightful green tint, with a liquid brilliancy that is quite distinctive and remarkable. It sells for about the same price as the diamond. Mr. Hidden tells us that the mineral is found in a narrow chimney in the rocks, not more than two feet long by two and a half inches wide, and having an inclination of almost seven degrees.

On the 26th of May the Western Watch Company's works, at Grand Crossing, Ill., were closed by the sheriff, at the instance of Mr. Marcus Kronberg, of Chicago, who is a judgment creditor, having advanced money to the company. His claim amounts to something

over \$3,000. In April last the president of the company executed a mortgage for \$4,000 in favor of his wife, without having notified Mr. Kronberg, who, upon hearing of the transaction, was very naturally startled, and at once resorted to legal measures to protect himself. His attorneys inform us that they consider an early and satisfactory adjustment of the existing troubles quite probable, although the works are still closed. The assets of the company are placed at \$17,000, and the liabilities at \$12,000.

TRAVELLERS will have their jokes,—the following is the latest.

A well known American Cutlery Co.'s agent says he received the following telegram from Montreal, where a would-be opponent was operating:—

"Annius Barker informs me he is offered a three thousand dollar order in this city, on consideration that he will not open his samples again in Montreal for six months."

The following reply was sent in answer to the above:—

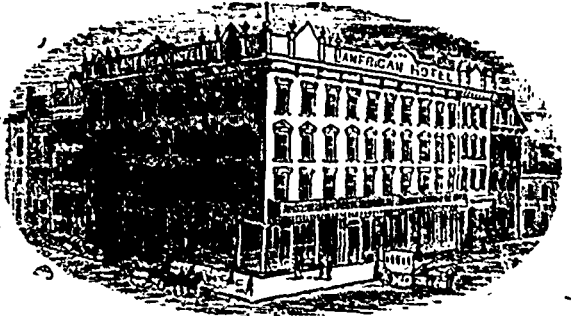
"Toronto sees Montreal and goes one better for Annius—and will give him four thousand dollars if he will not open his mouth for six months in Toronto."

In December, 1876, Mr. Jerry Robinson, now of Emerson, Man., failed in Mitchell, Ont., and his estate paid a dividend of 80 per cent. to creditors. Having been successful in the gateway city he has paid the remaining 20 per cent. of his old indebtedness—an act which should be imitated by many, but is as rare as it is creditable. It should be stated that Mr. Robinson held his discharge from creditors, and this action is purely voluntary on his part. One of the leading houses in the Dominion, themselves exemplars in business morality, and excellent judges of the proprietors in commerce as in other walks of life, in acknowledging dividend write as follows: "It is rarely we are asked to take payment in full of a debt that has been compromised and we appreciate the high sense of honor which dictates Mr. Robinson's action in the matter."

"BREVITY IS THE SOUL OF WIT."—The following amusing story, which was told by Franklin, ought to be read and acted upon by all correspondents communicating their thoughts to the newspaper press. A young man on commencing business, proposed to paint over his shop window, "John Thompson, hatter, makes and sells hats for ready money," to which was added the sign of a hat. One friend suggested that, as he made and sold hats, the word "hatter" was unnecessary. It was struck out and the sign remained "John Thompson makes and sells hats for ready money." Another friend advised him to omit the phrase "for ready money," as there would occur occasions for selling on credit, and so the sign read: "John Thompson makes and sells hats." It was then hinted the buyer of the hat did not care who made it, and the sign would be better if it read "John Thompson sells hats." But another amputation was in store still, for a critic pointed out the uselessness of the phrase "sells hats," "for," said he, "no one would ever suppose that the hats were to be given away for nothing." Thus at last this aspiring tradesman commenced business, like many worthy successors, under the modest sign of "John Thompson."—*Albany Press.*

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THIS old established Hotel containing 100 rooms, is located on the corner of Yonge and Front Sts., overlooking the Bay of Toronto, and being only one block from all of the R. R. Depots and Steamboat Landings.  
 This hotel has just been newly decorated, newly and elegantly furnished throughout with Brussels Carpets, Solid Walnut Furniture, Pure hair with the best Spring Mattresses, and new Billiard and Sample Rooms.  
 From its commanding location, and its future management, no Hotel in Toronto will offer superior accommodations to the travelling public. Rooms can be engaged by mail or telegraph.



WILLIAM MACKIE, - PROPRIETOR.

## ATTENTION!

Our Spring Stock is now complete and consists of English and American Jewelry, Swiss & Waltham Gold and Silver

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Spectacles, Silk Guards, &c.

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French and American Clock materials, Stem Winding and all other Wheels cut to order Watch repairing for the trade. A large stock of Swiss and American Main Springs and flat Watch Glasses for American Open Faced Watches.

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The "Scott-Field" Sporting Rifle.

The above cut represents the new "Scott-Field Rifle, manufactured by W. & C. Scott & Sons, Birmingham, England, for general sporting purposes. This Rifle has the "Field" patent action, which is considered by all sportsmen who have seen it to be the best ever invented. The fact that Messrs W & C Scott & Son and John Rigby & Co., of Dublin, have adopted the "Field" action for their new sporting and Target Rifles, is proof positive that in the opinion of these celebrated gun makers the "Field" is superior to all other actions now in use. The "Scott Field" Sporting Rifle is .44 cal., sighted up to 300 yards, and can be had either with plain or pistol grip stock. No Rifle in the market can approach it for simplicity, accuracy, convenience, durability and safety. Sole Agent for Canada.

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consistent with good  
material and workman-  
ship.



All orders forward-  
ed promptly, and war-  
ranted standard qual-  
ity.

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This month we solicit orders from the Wholesale Trade, for Gents' Gold and Silver Alberts, Ladies' Gold Guards and Necklets. Our design and patterns are the latest production, and best workmanship, all stamped and warranted. We keep all weights, sizes, and qualities of plain go'l rings, our own manufacture, in stock, so that orders can be filled immediately.  
Send for lowest cash prices by the quantity at once, so that orders can be filled early.  
Trade Watch and Jewellery repairing receive proper and careful attention, and returned early.

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Between Bay & Yonge Sts., nearly opposite Grand Opera House.

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American and French CLOCKS  
Ever imported into Canada.

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To CASH Buyers we offer SPECIAL INDUCE-  
MENTS.

Newest Styles in Yankee Jewelry  
Exceedingly Cheap.

**E. & A. GUNTHER,**  
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**WATCHMAKER AND JEWELLER,**  
Dealer in Sporting Goods, &c., Gold and Silver Plating done  
in the best style and warranted to wear. Trade work at trade  
prices. 351 RICHMOND ST., LONDON, ONT. All work  
warranted.

**WATCHMAKERS TAGS**  
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**LONDON CARD CO. LONDON ONT**

**T. WHITE & SON,**  
Manufacturing Jewellers, Gold  
and Silver Platers,

—AND—

**LAPIDAIRES,**  
12 MELINDA ST.,  
TORONTO.

Canadian Agates, Amethysts, &c.,  
Polished and Mounted for the trade. Store  
keepers in town and country will find all work  
good at moderate prices.  
N. B.—Always on hand a stock of  
Stones, Imitations, Locket Glasses, &c  
Unsurpassed in the Dominion.

# SHEFFIELD STERLING

## FLATWARE.

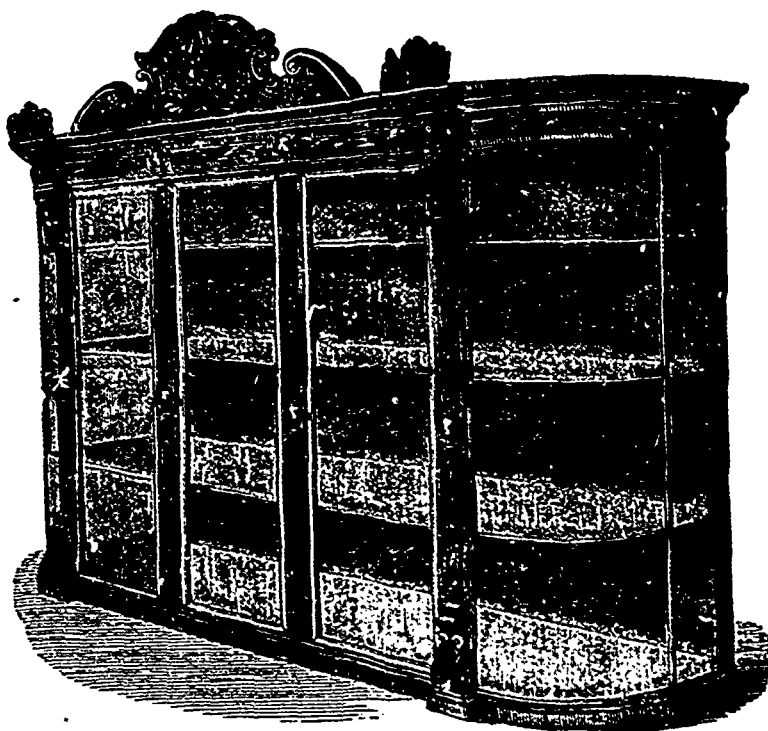
The best known substitute for Sterling Silver. Dealers who want Spoons and Forks that they can guarantee to give satisfaction, should use the Sheffield Sterling Brand. For sale, wholesale only, by the Company's Canadian Agents.

**ZIMMERMAN, McNAUGHT & Co., - TORONTO.**

ESTABLISHED 1859.

**W. MILLICHAMP & CO.,**29 TO 35 ADELAIDE STREET EAST,  
TORONTO.

SHOW CASE MANUFACTURERS AND SHOP FITTERS, GOLD, SILVER, NICKLE AND BRASS PLATERS, ENGRAVERS, &c., BRASS RODS AND BRACKETS FOR SHOW CASES AND SHOP WINDOWS TO ORDER, NICKLE AND BRASS WINDOW BARS, DOOR PLATES &c., CARRIAGE AND HARNESS PLATING.



We would respectfully call the attention of all dealers in Plated Ware to the above cut, shewing our new design of Wall Case for Plated Ware. They are the handsomest and most attractive Wall Case made. We get them up in Square and Circle ends, with Nickle-Silver doors, either to slide or open out. Size from 6 to 12 feet long and 6 feet high. Prices given on application. All styles of Counter and Window Cases in Silver and Wood and Silver jointed to order. Prices as low as quality of work will warrant. Send for our Illustrated Catalogue.

**W. MILLICHAMP & CO.**

THE receipts at the Montreal Custom House for May amounted to \$599,779, which is \$72,900 more than those of May last year. It is furthermore stated that the receipts at that port thus far in the fiscal year are the highest ever known. The duties paid at Toronto last month were large, being \$209,318 as compared with \$154,539 in May last year, and the Excise revenue was \$22,765 greater. The total value of the imports here that month was \$974,639. Customs receipts in Hamilton were \$75,418, against \$57,957, an increase of nearly 24 per cent., and the inland revenue for that city was \$1,389 greater. The collections made at all the other cities whose figures we have seen, indicate an increase over those of May last year.

JEWELS SUITED TO THE COMPLEXION.--Brunettes may wear diamonds, topaz, garnet, coral, and Etruscan gold jewelry. Women who have chestnut hair, pale, smooth skin, and hazel eyes, can wear corals, turquoises, and small diamonds set with other jewels in dull gold or platinum, as well as enameled, mosaic, and cameo jewelry. Women of no pronounced type, with dull, ashy-brown hair, and no brilliancy of complexion, will find delicately enameled jewelry becoming. Blue-eyed girls, who are not re-haired, and those with greenish-gray eyes, may wear turquoise jewelry to enhance their attractions. Pearls, amber and gold ornaments are also becoming to them. Diamonds are too flashy. It is well for the jeweler to study such points, as he is likely often to be consulted in the selection of appropriate ornaments by the fair sex.

ANOTHER WARNING.—The brief career of C. W. M. Hughan, Jeweler, of Bowmanville, whose business was last week disposed of by the Sheriff to the highest bidder, affords another illustration, if any were needed, of the folly of young men without either mercantile training or capital, rushing into business. Mr. Hughan commenced business barely two years ago, and received at that time about \$1,000 from his father to enable him to start. So careless was his habits that in eighteen months he had not only sunk the whole of his profits but all of the money loaned him by his father. In February last he called a meeting of his creditors and offered them a composition of twenty-five cents on the dollar of his indebtedness, but, although this was almost unanimously accepted, it was never paid, and the creditors are left without any reminder of the transaction save the entry on the wrong side of the profit and loss account. The stock which was sold at the instance of Mr. S. Downey, of Toronto, was bought by Messrs. Carrier, Marshall & Co., of this city, and afterwards re-sold by them to Mr. Aaron Buckler, Jeweler, of Bowmanville. Mr. Hughan's career

although brief, has been anything but glorious and we are afraid he will find it very hard to establish himself again in Canada.

LEATHER Cog-wheels.—In connection with leather it may be mentioned that Herr J. Kunkell of Metzingen, in the Black Forest, has taken out a patent in Germany for making cog-wheels out of leather. Cogs of this kind are noiseless, and besides wearing very much better than metal ones, they want no lubrication. Raw, untanned buffalo leather is cleared of all hairs, particles of flesh, and other extraneous substances; then as many pieces of it as are required to make up the thickness of the cog are put in layers on the top of one another with glue in between, and a strong pressure is brought to bear on them under a hydraulic press until the glue is quite dried up. When this is done, the cog-wheels are cut out of the leather plate with a saw, and are planed and otherwise fitted and finished. Cog-wheels of this sort possess all the properties hereinbefore mentioned.

The position of the English manufacturer as regards France will be bad indeed under the new French tariff, but in some respects it was very unsatisfactory under the old and by no means free trade arrangement. An illustration of this is to be found in the effect which the French tariff has on the cutlery trade. The Paris correspondent of the *Ironmonger* says that the commoner sorts of British goods are being rapidly driven out of the market by the German and native French cutlery, which are equal in finish and lower in price. He instanced the case of an itinerant vendor of cutlery—a man who frequented country fairs. Among other articles, this man sold annually some 7,000 pocket knives. These knives he had been in the habit of purchasing from Sheffield, and the price delivered in Paris was 4½d. each. He now, however, obtains from a St. Etienne firm, who sell him an equally good article at 3½d.

### THE WATCHMAKER And Metal Worker

Is the official Journal of the  
Watchmakers and Jewellers,  
of the northwest,  
CONTAINING 56 PAGES OF  
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Whose columns are replete with choice articles upon Horology, Watch-making, and repairing, written for this Journal by practical and scientific men; also a large amount of general information of vital importance to the trade; also continued articles, or lessons in letter engraving, written by a celebrated engraver of this city. Subscription price, \$2.00 per year. Single copy, 20 cents.

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A FIRST-CLASS WATCHMAKER, MUST have full set of tools. References required, also state wages required.

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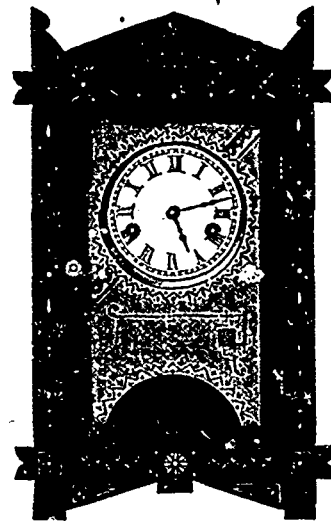
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I beg to direct the attention of the Trade to my large assortment of Clocks, from the following celebrated manufacturers, viz.:

SETH THOMAS, WELCH, NEW HAVEN  
GILBERT, AND ANSONIA.

I keep these Clocks in every style now manufactured, and show 180 different varieties of samples, besides Regulators of all kinds.

I will sell, only to the Trade, any of the above makes of American Clocks at prices lower than any house in Canada, and will guarantee to meet any competition either in quality, style or price. Also a large variety of Ladies and Gent's Swiss Watches, Gold, Silver and Nickle Cases, Key and Stem winders.

Prices can be had by the trade on application, and we guarantee to fill all orders promptly at the prices quoted.

Jewelry and Fancy Goods of all kinds.

### SAMUEL STERN,

Sole Agents for SETH THOMAS CLOCKS,

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Expect to be able to fill all their back orders for

## LANCASTER WATCHES

in a few days, and in the meantime beg to thank the Trade for the kind indulgence extended to them.

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**BOSS IMPROVED**  
**FILLED GOLD WATCH CASES**

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**LEADING**

In Price, In Shape,

In Style, In Construction,

and Finish.

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**POPULAR**

Because they Sell

Readily, are Guaranteed;

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**HAGSTOZ & THORPE,**

SOLE MANUFACTURERS,

19th AND BROWN ST., PHILADELPHIA, PA.



# "THE LANCASTER WATCH."

EVERY WATCH

**FULLY GUARANTEED**

FOR

**FIVE YEARS.**



**ALL LANCASTER WATCHES**

HAVE

**FINE THREE-QUARTER PLATE**

**MOVEMENTS.**

## THE BEST WATCH IN THE WORLD FOR THE MONEY.

THE Lancaster Watch has been thoroughly examined and been very highly commended by the most skillful watchmakers of New York and Philadelphia. One of these experts pronounced it a fine Swiss watch with an American trade mark, and was with difficulty made to believe it the *bona fide* product of a Pennsylvania Watch Factory. Another, after very careful examination, says. "It is the best jewelled watch made in America; it has the best Stem-Winding arrangement to be found in any American watch, it has the best Conical Pivots, and the only ones I have ever seen outside of England that were made right."

Mr. Aug. Krueger, an authority in watches, says. "I find your watches so good as to stand fully equal to any others of American manufacture, while in several respects, particularly in the stem-winding work, they surpass all competitors."

Mr. R. T. Polack, dealer in watches, writes. "I consider your present movement the best in the market for anything near the same price made by any of the other American manufacturers."

Mr. Jas. G. Thompson, dealer in watches, writes: "I have examined your watch carefully and am very much pleased with it. It is decidedly the finest American watch ever brought to my notice."

Messrs. Wilson & Schlechter, dealers in watches, write: "Our watchmakers, and all parties, like very much the appearance of your watch. We are offering it instead of the Howard Movement that we used to keep."

Mr. Wm. Thompson, who has had large experience in English, Swiss and American watches, says: "Having examined several of the Lancaster Watches, I find them sound in principle, accurate in construction, and of such finish in detail as to be capable of close adjustment for temperature and position. The stem-setting arrangement is excellent, and, so far as I know, the only one of the kind applied to watches made in this country."

Mr. Alden Webb, who has had many years' experience in the manufacture and adjustment of the finest watches made in this country, places the Lancaster Watch with full confidence, at the head of the list and pronounces it, as did the Geneva authority, "the best watch made in America." He says:

"The winding and setting arrangements, which are at the stem, are the best I have ever seen, simple, strong, and not liable to get out of order. The design is very pleasing, more handsome than any other I know of. The nickel movement will stand the test with the very best grades made in this country. Having adjusted the finest watches made in America, I feel fully competent to decide that the 'Lancaster' can be rated to keep as close time as any watch made anywhere throughout the world."

**SEND FOR PRICE LIST AND TERMS TO**  
**ZIMMERMAN, McNAUGHT & CO.,**

**56 YONGE ST., TORONTO,**

Sole Agents for the Sale of these Watches for the Dominion of Canada.