

minion will watch with deep interest the progress of this conflict there can exist not the shadow of a doubt; and rather than allow a successful blow to be struck at the life of a sister Union, let all rally in defence of our glorious standard, and allow no such dastardly outrage to be committed with impunity.

FROM TORONTO TO VIENNA.

ON BOARD STEAMSHIP "CIRCASSIAN,"
July, 1873.

Believing that a few "notes by the way" may prove interesting to the readers of the WORKMAN, I purpose transmitting a few occasionally. Whatever interest a minute and particular description of our "floating home" may attach to the passengers of the Circassian, I do not think they are of sufficient importance to interest your readers; and shall content myself with merely saying that the vessel is deservedly pronounced to be one of the best of the Allan Line, and that all her appointments and arrangements are most perfect and complete.

We started from Quebec about ten o'clock on the morning of the 'Glorious Twelfth,' the weather being most beautiful. The run down the St. Lawrence was very fine,—the magnificent scenery on either shore being rapidly passed in a grand panoramic view. All day Sunday we kept the coast well in sight, and at 10 p.m. passed the light on Anticosti. During the day the log showed a run of 330 miles.

On Monday we entered the Straits of Belle Isle, with Labrador on the left and Newfoundland on the right. From the vessel the appearance of the land was rugged and sterile in the extreme, with here and there a fishing hamlet along the coast. We had anticipated fog, but the weather proved very bracing, and the sky clear and blue. Monday afternoon the interest of the passengers was considerably aroused at the appearance of a number of whales "spouting" in fine style. Passed the light house on Cape Norman—742 miles from Quebec—at 4 p.m. All the afternoon we were passing in swift succession numbers of icebergs, some of them of immense size, looking like large mountains; others in their fantastic shapes presenting almost the appearance of vast cathedrals, with many pointed turrets,—their peculiar shapes, and lights and shades of color presenting a novel, grand, and imposing spectacle. During the afternoon we had a sharp gale, which very seriously marred the pleasure and comfort that all had experienced up to this point. On Monday the run was 303 miles.

About midnight we fairly passed out into the Atlantic; the swell was very great, and the vessel had considerable motion. The result was that very many of the passengers began to "cast up accounts" and pay their tribute to Old Father Neptune. Next morning at the breakfast table, there was plenty of elbow room. Tuesday we had a very strong head wind, the water was very rough, the boat tossing considerably, and the weather beastly cold and raw. Those who made their appearance on deck, did so in extreme winter costume. Very many more of the passengers succumbed to the motion, and, on the principle that "a fellow feeling makes one wondrous kind," could heartily sympathize with the poor Frenchman, who, under similar circumstances, was once aroused by a knock at his cabin door and a voice calling for his boots, "Boots!" cried the unfortunate victim, "Boots! yes, by gar, you may have yem, for I shall never vant yem any more." It is hardly necessary to say that the attendance at the tables was becoming "smaller by degrees and beautifully less." No sail in sight—nothing but a dead leaden sky and raging waters. Only made a run of 270 miles.

Wednesday and Thursday the weather rather worse, and only made 207 and 220 miles respectively. On Friday to add to the previous discomfort a drizzling rain prevailed all day, and the log only showed a run of 210 miles. About midnight the weather abated somewhat and the wind veared round, so that on Saturday it was somewhat more pleasant, though there were slight dashes of rain throughout the day. The wind, however, being a little in our favor, we managed to make a run of 260 miles. Soon after eight at night, we passed a sail,—the first we had seen since Monday night, you may therefore imagine how eagerly it was watched.

The appearance of early Sunday morning gave promise of something better, but shortly after eight the rain came down, the wind being horribly cold, and this state of things continued most all day. Service, however, morning and evening, broke the monotony of the previous days' misery, and the weather clearing up towards evening, the countenances of the passengers assumed a more cheerful cast, and the night closed in more favorably. The run made during the day was 290 miles.

Monday the weather was most delightful, and about ten o'clock we sighted the coast of Donegal. All was now cheerfulness and expectancy on board. After a few hours' run we entered Loch Foyle. The beauty of the scenery, from the light-house at the point, on by green cattle—an ancient moss-covered relic of feudalism—to Moville, was enchanting in the extreme,—a perfect panorama of beauty—all the more appreciated in that the day was clear and warm. In fact, this was the first really enjoyable day since we lost sight of Belle Isle. At Moville the tender came alongside to take off mails and passengers for Londonderry, and for a time all was bustle and excitement. This having been accomplished, the boat then turned back on its way to Liverpool. We passed the noted "Giant's Causeway" just before nine p.m., but unfortunately the falling light prevented a good view. The log showed a run of 270 miles.

Tuesday, our tenth day out, dawned beautiful and clear, and somewhat warm. At six a.m. we passed the light houses of the Isle of Man, and had a very fair view of that memorable isle. From this point, all along the channel, were seen evidences of marine activity,—steamboats and sails in sight in large numbers all the time. We arrived at the "bar" fifteen miles below Liverpool just after the tide had run out, and consequently had to drop anchor, and remain in inactivity so far as the vessel was concerned till the return of the tide, and did not reach Liverpool and bid adieu to our late associates, till after ten at night. During the latter part of the afternoon and evening, we experienced one of the sharpest thunder storms, accompanied with vivid flashes of "forked lightning" that I ever remember. Having thus stated our arrival in the Old Land, and feeling that I have already perhaps overstepped the bounds of prudence in the length of my letter, I close for the present.

MINERAL WEALTH.

[No. 1.]

BY R. E. Y.

The discovery and use of metals date from a very early period. Most of the more useful descriptions were known as far back as history will carry us, and two or three were unquestionably made serviceable in pre-historic times. It is believed, that while Europe was as yet in a barbarous condition, China, India, and Egypt, were well skilled in the working of metals; but in consequence of the methods of extraction and manufacture then employed, the quantity obtained was not great.

Geologically and geographically, the distribution of useful ores is very unequal, and in quality as well as in quantity. The richest deposits are those found buried in the primitive rocks, and in the transition series which immediately overlie them; but nearly all the other strata contain more or less, and sometimes have veins of metallic ore of very valuable character.

It is, of course, dependent on the fact of the position, as well as the existence of any particular strata, what the practical character of the mineral wealth of any country may be. In many cases there is every reason to believe that considerable stores exist, but the difficulties in the way of reaching them are at present too great to allow of any successful attempt being made. In other cases, numerous metallic veins are often discovered, which at first seem to hold out some promise, but are found to be too thin to make their working profitable.

To so small an extent, however, have proper investigations been made, that it is impossible to form an idea of the actual quantity of useful minerals distributed over the globe, which are within reach; but judging from past discoveries, and those which are now being so frequently made, it must be concluded that it is greatly in excess of what has been generally supposed.

On the mainland of Alaska, and in the Aleutian Islands, immense deposits of the finest description of Cannel coal have been only recently discovered. On the Isthmus of Panama, an equally unexpected and most important discovery of coal beds which seem to be inexhaustible, has been made, which seems likely to affect great changes in the steam navigation of the Atlantic and Pacific oceans. Though, singularly enough, the fact of the existence of coal on the Isthmus is directly at variance with the theories of the great Humboldt and other eminent physical geographers, who were of opinion, that coal could never be found of good quality and in large quantities in volcanic countries. In India, the exploration of the geological survey in Berar, has resulted in the discovery of 121 square miles of coal strata, averaging in thickness 40 feet, and representing the enormous quantity of 4,840,000 tons of the mineral; and not only is the coal of superior quality, to any yet found, but it possesses

the advantage of being at a comparatively easy working depth.

In Japan, the coal mines, which were only opened about two years ago, are becoming a source of considerable wealth to the state. The coal produced was tested by Mr. Madden, chief engineer of H. M. ship "Ocean," and was proved to be equal for steaming purposes, to the best North of England coal.

In Australia, comparatively little investigations has been made, but so far, it would appear that in some portions of the continent, as for instance in Victoria, the quantity of mineral deposits, excepting one or two descriptions, is of a very limited character, and generally is so distributed as to render the ores not profitably workable. The exceptions are gold, coal and iron. The coal is found in considerable quantities, without being super-abundant.

In New South Wales, however, it is stated that no idea can be formed of the vastness of the coal beds. The whole basin of the Hunter River is one coal-field, extending from the sea at Newcastle to the dividing range of mountains, 100 miles inland. The coal is also procured with little difficulty, near and at the surface. In 1851, a commencement was made to work a seam eleven feet thick at only 25 fathoms from the surface, and about 40 miles from this, the discovery was made, of another seam of coal cropping out of about 34 feet in thickness, and of superior quality.

The most important mineral yield, however, in Australia is gold. Some of the nuggets found, especially in the earlier years of the search, were very remarkable. In the Report of the Commissioners of Mines, it is stated that in June 1857, a large nugget was found by a party of 24 at Ballaarat, Victoria, at a depth of 180 feet, which proved to be very valuable. It was 20 in. length, 12 in breadth, and 7 in depth, weighing 1cwt. 1qr. and 12lbs., and enriched the finders to the extent of \$52,500. In 1857, four men found a nugget weighing 145lbs. troy, at a depth of 13 feet, and within five or six feet of holes dug a few years previously, which was sold for \$34,500.

At Canadian Gully, a party of four, who had only been three months in the colony, after digging down 60 feet were rewarded by finding 134lbs. of the same precious metal, which, when sold, gave to each man over \$5,000.

Passing to America, we find that Canada has proved to be, according to the Report of the Government Geological Survey, unexpectedly rich in mineral ores. Both the Eastern and Western Provinces abound in minerals of the highest importance in a commercial and speculative point of view, which only require combined capital, scientific investigation and skilled labor to develop their almost unbounded resources, with unquestionably good prospects of handsome returns on any judiciously expended capital for that purpose, and which would thereby make Canada one of the richest mineral producing countries in the world. Iron especially, exists in vast quantities, and is practically inexhaustible.

In 1870, the total products from the mines on the shore of Lake Superior alone was no less than 856,471 tons, an increase of 213,223 tons over that of 1869, while the total yield since 1856 has been 3,768,695 tons of iron ore, or 239,160 tons of pig-iron, value \$27,799,809. There is, however, one serious deficiency, and that is, in respect to coal. Excepting in Nova Scotia and Vancouver's Island, there are no coal deposits of any value, nor is there any reason to think that any will be found hereafter. From the character of the geological strata, it is the opinion of those most competent to judge, that the existence of any deposits of this material is almost a physical impossibility.

In the United States, on the contrary, the quantity of coal seems from all accounts to be enormous, while they are little behind Canada, in respect to iron and other useful metals. What is known as the anthracite deposit of Pottsville, is stated to be 60 miles long by 2 broad. In some instances a single seam of coal in these strata is 60 feet thick, and near the middle of the valley, between the Sharp and Broad Mountains, no less than 65 seams have been counted. The bituminous coal-field embracing the western part of Pennsylvania, and a part of Ohio, extends over an area of 24,000 square miles, the largest accumulation of carbonaceous matter probably in the world. In fact the bituminous coal measures can apparently be traced almost continuously from Pennsylvania to the Mississippi, and even into Missouri 200 miles west of that river.

Deposits of a similar character, but less in extent are also found in South America, though little has been done to develop them. About two years ago, coal beds of a very valuable character were discovered on the Loa River, on the boundaries of

Bolivia and Peru. The latter country has long been famous for its silver mines. The most notable of the latter, Potosi, discovered in 1545, yielded within 83 years something like 400,000,000 of ounces of silver, and in another mine a single lump was found weighing over 800 pounds.

In Europe, all the countries are fully supplied with mineral ores of a valuable nature. Russia principally so as regards gold and iron; and Austria, while almost equalling Russia in gold, is rich also in almost all the useful mineral ores, with the exception, perhaps, of tin; but either from the restrictions caused by bad government, or other reasons, in neither of these countries is the production at all commensurate with the resources available. Prussia, Spain, Belgium and France, are in many respects less favored than Russia and Austria, yet, show far greater results. Spain has during the past few years carried on mining operations with great vigor and success. It has numerous excellent deposits of copper, lead and iron, the products of which are being exported in increasing quantities. The iron produced in Belgium is stated by some to be superior to any on the continent, not even excepting that of Norway and Sweden, and the demand for it is so great at present, that the supply is quite inadequate. The Swedish is also much sought after on account of its great purity, a purity which is, however, simply the result of the fact that the ores are smelted with charcoal, the dense forests of the country affording an almost inexhaustible of this fuel.

Ireland is singularly deficient in the possession of useful minerals, a fact which is at least one substantial grievance of that unhappy country. In a few districts mining operations are carried on, of which the copper mining of Wicklow is particularly noticeable, but in no case are the workings of a very profitable character.

On the other hand, Great Britain is peculiarly favored, both in regard to the quality and quantity of her mineral treasures, and taking the size of the island into account, it must be regarded as occupying perhaps the highest position in this respect in the world. Of what are known as the precious metals, and stones, the production has been comparatively trifling, but the deficiency in these is more than made up for in the abundance of those known as the useful metals, such as tin, copper, iron, &c. From very early times, England supplied distant countries with tin and copper, principally from the Cornwall mines, and these still continue to yield a large and increasing quantity. The present year's value of exports of tin alone is over \$10,000,000, yet the real development of the deposits is of comparatively recent date. Up to the end of the 17th century only small quantities of copper were produced, perhaps not more than 1,000 tons per annum, but since then the development has been rapid. At the end of the 18th century, the production had risen to nearly 60,000 tons yearly, and the value of the exports alone now amounts to about \$16,000,000. Lead is chiefly found in the counties of Durham, Northumberland, Yorkshire, and Cornwall. At the beginning of the present century, the production was about 10,000 tons yearly—it is now over 100,000 tons. Making a comparison of this yield, we find it to be equal to 3 of that of the whole Continent of Europe—three times as much as Spain, alone, and five times as much as the United States.

EARLY CLOSING.

The boot and shoe merchants on King and Yonge street have engaged to close their respective places of business at one o'clock every Wednesday afternoon during the month of August.

MOONLIGHT EXCURSION.

No. 1 Company, Q. O. R., intend holding their first annual moonlight excursion, on Tuesday, the 12th inst., on board the City of Toronto. The quadrille band of the regiment will be in attendance. Those wishing to spend a few pleasant hours cannot do better than to accompany our gallant defenders on their excursion.

UNION PIC-NIC.

The Longshoremen's Union, No. 1, has announced its first annual pic-nic, which will be held on Monday, the 11th August. The steamer Bouquet has been chartered to convey the pic-nickers to Port Credit, where prizes will be competed for. A quadrille band will be in attendance to cater to the enjoyment of those who indulge in dancing. This spirited union is deserving of all the support that can be bestowed upon it by members of sister unions.

For first-class Book and Job Printing go to the office of the ONTARIO WORKMAN, 124 Bay street.

TO THE ORGANIZED WORKINGMEN OF CANADA.

FELLOW WORKINGMEN,—The Toronto Trades' Assembly, with the advice of the organized workingmen of the chief centres of industry in our country, have resolved to address this circular to all organized bodies of labor that we may have knowledge of in Canada, for the purpose of ascertaining the views of all such labor unions upon the advisability and propriety of calling a LABOR CONGRESS in the month of September, to take into consideration the various questions that at present directly affect the interest of labor in this country:—such, for instance, as the Trade Union Bill, which the present Administration of the Dominion have signified their willingness to amend, so as to meet the reasonable wishes of trades unionists, so soon as the Unions agree, and put in proper shape such amendments to the bill as they deem necessary; the creation of a proper Lien Law, that will give those who labor the same legal powers to collect their earnings from the property improved by such labor, as the landlord has to collect his rent.

Other questions of equal importance will be taken into consideration; such as questions bearing on the relation between employers and workmen, that have been so carelessly handled by our legislators of late, without consulting the feelings of the workmen on subjects of such vital importance to them.

Also, the permanent organization of a Dominion Labor League, so that we may over be ready to advance our interests in unison with promptness and effect.

Fellow Workingmen, give the question briefly set before you in this short circular your earnest attention; and send all communications to John Hewitt, ONTARIO WORKMAN Office, Toronto.

(Papers favorable to the cause please copy.)

WORKINGMEN'S CLUB AND INSTITUTE UNION.

The annual meeting of the members of this association was held on Friday the 11th ult., in the Hall of the Society of Arts, John street, Adelphi.—The Marquis of Lorne occupied the chair. He said other clubs, which he believed to be good things, were not very popular among the ladies, and in fact he thought that if ever ladies came to have the making of the laws they would abolish those clubs by Act of Parliament. But workingmen's clubs, he believed, were very popular with the workingmen's wives, because they kept the men from the pot-house and the gin-palace.—Mr. Hodgson Pratt read an abstract of the report, from which it appeared that 74 new clubs had been reported to the Council during the year, raising the total number to 535. In London the number had increased from 52 to 76, and 15 of the new clubs had affiliated themselves to the union. As regarded the metropolis, the principle event of the year had been the opening of the Grosvenor club in Piccadilly, which had its origin in the liberality of the late Marquis of Westminster. It has about a thousand members, so that it is quite self-supporting.—Mr. T. Hughes, Mr. Mundella, Lord Lyttleton, Sir Harcourt Johnstone, the Rev. Mr. Suffield, of Croxson, and the Rev. F. Verney, of Sheffield, then addressed the meeting in support of resolutions adopting the report, and declaring that workmen's clubs are calculated to promote the national welfare by raising the tastes, habits, and intelligence of the people. The proceedings were brought to a close by a hearty vote of thanks to the noble marquis for presiding.

JAMES BANKS, AUCTIONEER AND APPRAISER,

45 Jarvis, Corner of King Street East.

Mechanics can find useful Household Furniture of every description at the above Salerooms, cheaper than any other house. Cooking and Furlor Stoves in great variety.

SALEROOMS:

45 and 46 Jarvis, Corner of King St. East.

Furniture Bought, Sold, or Exchanged. 58-10

EATON'S NEW DRESS GOODS!

We show to-day a choice lot of Dress Goods, in check, plaid, and striped material—all the newest, and in colors. A job line of Black Lustres, 100 opened to you at the hour, and a bargain.

MEREDITH, CORNER YONGE / Dep. Min. of the Interior

Ant. Agent, anterior, Ordnance Land Branch, 1 July, 1873. COME AND SEE 58-10