

direction as to injure ourselves and benefit others. In some of our upper lakes, the restriction upon setting pound nets prevents our Canadian fishermen from catching fish as cheaply as the American can. The fish which our fishermen are prevented from catching are taken by the Americans. Our men have to use the gill net, although the ground net could be made with meshes, such as the gill net has, thereby affording sufficient protection to the fish. The effect of such regulations is, that our fishermen can scarcely get a living, while the American fishermen make money.

The new Bill respecting fishery by foreign vessels repeats the provision that 24 hours warning shall be given to foreign vessels found fishing within three miles of the coast without a license, and provides that such vessels can be at once brought into port, and be examined as under the existing law. The introduction of this bill seems to indicate that the license system is not to be abolished.

BANK OF UPPER CANADA IN THE DOMINION PARLIAMENT.—On the 24th, Mr. McKenzie moved for the correspondence relating to this bank, and in doing so, called the attention of the House to the unsatisfactory way in which the affairs of the bank were conducted. He said there had been \$14,000 expended in the last three years, and that a single liquidator should be appointed to enforce settlements. Sir Francis Hincks entirely agreed with Mr. McKenzie, as to the unsatisfactory state of affairs, and promised that legislation on the subject would be had at an early day. Mr. McKenzie again returned to the subject, affirming that there was reason to believe that a large portion of the property had materially deteriorated in value, and that any possible increase in value would be more than counterbalanced by the taxes and expenses incident to retaining it. Mr. Blake coincided in this view, and urged that steps be taken at once.

We have repeatedly called attention to this matter, and urged the duty of decisive action upon the Government. The assets have been nursed long enough, what remains should be realized at once. This plan may conflict with individual interests, but it is the only one consistent with the rights of creditors; their cause can only suffer by delay.

THE TECHNOLOGIST.—This is an illustrated journal, published by the Industrial Publication Company, New York, and is devoted to "engineering, manufacturing, and building." The first number has just come to hand. As a specimen of the typographical art, it is faultless, and its contents are valuable to those interested in the subject with which it deals. Puffing will be eschewed, the publishers say—an easier doctrine to preach than to practice. Platitudes and puffs are the bane of journalism; they rob the press of half its power. We detest them. "No puffing here" should be inscribed over the door of every

sanctum in which there is any self-respect. If our contemporary will stand firmly on this platform, along with a continuance of its present vigorous business management, its success is undoubted.

DESTRUCTION OF THE NORTHERN ELEVATOR.—This was a most disastrous fire for the insurance companies. It seems to have originated accidentally, probably from the elevating machinery; but many will apply it as an illustration of the necessity for the warning we gave a week or two ago, in reference to the danger of insuring on a falling market. The companies will lose about \$160,000, and some private individuals are also considerable sufferers. Filled as the elevator was with breadstuffs and grain, the fire could not have happened at a more unlucky moment.

RICHÉLIEU COMPANY.

The above company have issued their annual report with statements of accounts for the year 1869, in conformity with their Act of Incorporation. From this it appears that the gross earnings of the Company during 1869, amounted to \$370,021 75. The gross expenses for 1869

Profit	\$110,245 77
Balance of Reserve Fund from Feb. 1869	49,231 40

Total available surplus	\$159,477 17
The above enables the Directors to declare a 10 per cent. dividend, in addition to paying on account of Steamers (purchase and repairs)	\$47,958 73
Wharves at sundry places	10,775 02
Dividend payable 1st Oct, 1869	25,000 00

Add 10 per cent dividend now declared	50,000 00
.....	\$133,733 75

Leaving to credit of Reserve Fund	24,743 42
.....	\$159,477 17

ASSETS.	
4 large steamers costing	\$467,000 00
1 do do (in process of construction)	33,359 00
7 small steamers	40,000 00
12 Steamers which cost	\$510,350 00
New issue of stocks (16 shares)	2,080 00
Property at Quebec	\$71,000
Three Rivers	10,000
Sorel	27,000
Other places	17,140

Pontoons, &c	\$125,110 00
Reserve Fund	8,150 00
.....	25,743 42
.....	\$701,442 42

LIABILITIES.	
Capital	\$500,000
Due on Gillespie property	45,000
Contingent Fund	50,000
.....	\$595,000 00

Leaving a surplus of	\$106,422 42
From the above statement it would appear that, in addition to a contingent fund of \$50,000 00	
There is an apparent surplus of	106,422 42

Shewing assets in excess of liabilities	\$156,442 42
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We do not notice any depreciation account, or insurance payments, nor is it stated if the property of the company is insured.

The Canadian Navigation Company receive \$4,000 per annum, for five years (1869-74) towards expense of keeping two first-class steamers on the route from Quebec to the Saguenay.

The Trois Rivières, plying between Three Rivers and this city, has proved a success in every respect.

The Directors are employing Bessemer steel in the construction of the engine of one of their steamers—and building solid wharves accessible at all seasons wherever land is not too high. Wharves will be commenced at Chambly early this year—the land and timber required having already been bought for that purpose.

THE MAGNETIC IRON SANDS OF CANADA.

Dr. T. Sterry Hunt writes under date Montreal, January 20th, as follows:—

Sir,—So many inquiries have come to me of late, about the magnetic iron sands of Canada, their extent, composition and mode of working, that I am induced, in advance of a Report about to be published by the Geological Survey, to send you a few notes, hoping that you will give them publicity through your valuable journal.

The sands from the mines of the crystalline rocks in Canada, as in most other regions, hold considerable quantities of iron ore, which along the shores of lakes and of the sea is seen partially separated by a natural process of concentration through the action of the water. The ancient marine sands which are found in the Lower St. Lawrence, from the present sea level to altitudes of several hundred feet, are often bounded and in some places beds of several inches in thickness are almost free from the admixture of sand. More generally, however, to obtain it of such a degree of purity requires a process of artificial concentration by washing or otherwise. The black sand thus obtained is not homogeneous, but may be separated into a magnetic and a non-magnetic portion, the latter predominating in the washed sand. While the magnetic part is nearly pure magnetic iron ore, the other portion contains from thirty to thirty-five per cent. of titanite, and consists in great part of titanite iron (menaccanite), with some admixture of garnet.

Successful attempts have been made to work these iron sands at Moisie, where they are treated in bloomery fires, and are reduced without difficulty, the daily yield of iron to each furnace being as great as in the similar furnaces of Northern New York, where non-titaniferous ores are used. The bar iron thus produced is of excellent quality, and retains no titanium in its composition, while the fluid and readily-crystallizable slag hold a great deal of titanite acid, as silico-titanate. The layers of iron sand at the Moisie are very rich, and the same is true of many other deposits in that vicinity and at Mingan, Natashquan, and elsewhere; but in many localities there are great quantities to be obtained which yield by washing from eight to ten per cent. to thirty or fifty per cent. of heavy black sand. Attempts have been recently made to purify these by means of a magnetic separator, which leaves behind both the silicious and titanite portion. For the bloomery fire such a degree of purification is not required, but for some of the newly-proposed processes of direct conversion, or for the manufacture of malleable iron from pig metal by the Ellershausen process, and generally for ore intended for separation, it is deemed desirable to get as high a percentage of iron as possible, or, in other words, to obtain pure magnetic iron ore. This, in the case of these titaniferous iron sands, can only be attained by the use of magnets. Dr. Larue, professor of chemistry at the Laval University, Quebec, has contrived for this purpose a simple and ingenious machine, which appears to be entirely novel in its arrangements, and is very efficient and rapid in its action. One of these I have seen in operation at Quebec, and of another put in operation at Clif-