

under the supervision of the Admiralty, as under the terms of the Imperial subsidy the British Government has the right of pre-emption in the time of war. It is believed that they will be laid down upon the same plans as the two new White Star Line steamers, which are to meet the wishes of the Admiralty contractors, with their boilers under water and propelled by twin screws.

SOME idea of the extent to which mechanical ingenuity and efficiency have advanced may be had from the following statement: "It is now possible to construct a complete sewing machine in a minute, or sixty in one hour; a reaper every fifteen minutes, or less; 300 watches in a day, complete in all their appointments. More important than this, even, is the fact that it is possible to construct a locomotive in a day. From the plan of the draughtsman to the execution of them by the workmen, every wheel, lever, valve and rod may be constructed from the metal to the engine intact. Every rivet may be driven in the boiler, every tube in the tube sheets, and, from the smoke stack to the ash pan, a locomotive may be turned out in a working day, completely equipped, ready to do the work of 100 horses.—*Boston Journal of Commerce*.

A TELEGRAM from Detroit, Mich., says that great excitement prevails at Crystal Falls, in the northern part of that State, over the discovery of a new iron range, with a continuous vein of ore two miles in length, which is now being opened. The first ore found on this new range was at the Lee Peck mine, and it is said to be of a soft, greasy texture, in color rather bluish, and is of the highest grade of non-Bessemer ore—an article that will be much sought for when it finds its way to the markets. The vein seems to run in a northeast and southwest direction. Several test-pits have been sunk and each one shows up the same fine quality of ore. Mining circles are all at fever heat over the new range and the exceedingly bright prospects for a big boom before another year passes. All lands adjoining this latest find are being optioned as fast as possible, and exploratory work is being pushed vigorously.

It should not be forgotten that this proposition also implies a complete surrender by the Dominion Parliament to the American Congress of all control over the principal source of the Dominion's revenue—the tariff. Whatever it may please the American Congress to do regarding the tariff, that the Dominion Government must forthwith accept. Our Congress would have even more power over the Dominion tariff under this arrangement than it would in the event of political union, because the people of the Dominion would have neither vote nor voice in Washington under the proposed Commercial Union, while they would have both under political union. Not only would our Congress prescribe and change at pleasure all the tariff taxes enacted from the people of Canada, but our executive officers and our courts would make all the rulings and decisions affecting rates for the Dominion as well as for the United States.—*Chicago Times*.

It is understood that the Parisian syndicate, which is said to include the Rothschilds, have renewed their propositions to the Dominion Government relative to the establishment of smelting works in the Lower Provinces, the development of the mining resources, and the construction of railways in the mining regions of Nova Scotia. Representatives of the organization recently held a conference in London, Eng., but as the scheme is very elaborate in detail, nothing was done, the Canadian Ministers agreeing to submit the proposition to the Cabinet on their return to the Dominion. The capitalists, among other things, are desirous of going into rail manufacturing, expressing a desire to secure co-operation with the Canadian Pacific, Grand Trunk and other Canadian railways, rather than be considered an opposition enterprise. It is understood that the syndicate has been formally notified that the Government will not consider any proposition for the purchase of the Intercolonial Railway until the completion of the Short Line Railway.

A CORRESPONDENT of the *Globe*, W. Dryden, jr., in a letter on Commercial Union, says:—"Give the [Canadian] farmer 10 cents a bushel more for his barley and there will be such a stimulus given to the production of barley that in place of sending \$5,000,000 of barley to the United States we will send \$10,000,000. Give the farmer 20 per cent. more for every horse sent to the United States, and in place of \$2,000,000 worth of horses we will send annually across the line \$5,000,000." From whence is the Canadian farmer to get his ten cents a bushel more for his barley and twenty per cent. more on every horse? Evidently Mr. Dryden expects him to pocket the duty now paid to the United States Government on those articles. If the Canadian farmer is to pocket the duty, the American purchaser will have to pay just as much as he does now for Canadian barley and horses. What inducement then will there be for him to double his purchases of these things? And unless he be willing to

buy, how can the Canadian farmer sell? These are questions which Mr. Dryden should take into his most serious consideration. *Kingston Chronicle and News*.

A COMPARATIVE statement of Canadian exports and imports, and the duties collected thereon, compiled from the monthly statement published by the Department of Customs, with the addition of British Columbian statistics, which were not included therein, shows a most gratifying state of affairs for the fiscal year ending the 30th of June last. We find that the total value of goods exported in that year amounted to \$89,515,811, against \$85,251,314 for the previous year, or an increase of \$4,264,497. The imports are placed at \$112,424,561, or an increase of \$8,467,675 on the previous year's operations, giving the lie direct to those chronic grumblers on the Opposition press who declare that the trade of the country is in a languishing condition. Of this amount \$105,639,428 were entered for consumption, showing an increase of over \$6,036,734 for the fiscal year of 1886-7, while the duty collected reached \$22,469,706, an excess of \$3,021,582, as compared with the previous twelve months. It will thus be seen that the volume of business has increased in the direction indicated by over twelve and a half millions of dollars. This increment is significant, and illustrates how fully the National Policy has met the requirements of the people.

SOME of the Reform papers express dreadful disgust at the appointment of Mr. Thomas Cowan as postmaster of Galt. This seems to us very unreasonable, for next to the appointment of a Reformer by Sir John, we should think nothing would please them so well as the retirement from political life of such a promising man and able speaker as Mr. Cowan. We are sure, at all events, that such are their inner feelings, but the habit of finding fault is so strong that they must humor it, which they know they can do safely, since Sir John is not likely to change the appointment. Therefore, though they are glad Tom Cowan is shelved, they will still find fault. The *Woodstock Sentinel-Review*, however, is reasonable. It says that "from a party standpoint Mr. Cowan deserves his reward. He is a man of ability and will fill the office of postmaster well. While Reformers have never admired Tom's methods as a stump speaker and politician, many of them have always had a warm side towards him personally. With us they will congratulate him on his appointment, and wish him long life and prosperity as postmaster of Galt. No selection the Government could have made would give more general satisfaction."—*Stratford Herald*.

THE severe competition in recent years in every branch of industry has set innumerable keen wits to work, with the result of many startling improvements in various trades, but there are few which compare in importance with the "simultaneous" process of color printing, which promises to entirely revolutionize some classes of calico and velvet and velveteen printing, and also the printing of advertisements in colors. We need only to allude to a new machine shown at the Manchester Exhibition, by which ten colors can be printed at once, which is a great stride forward. The novel character of the "simultaneous" process will be at once understood when we mention that by it, if required, 1,000 shades could be printed off at one impression. Instead of using engraved rollers, as in ordinary calico printing, or stones, as in the case of colored advertisements, the designs or pictures are "built up" in a case in solid colors, specially prepared, somewhat after the style of mosaic work, a portion is then cut or sliced off about an inch in thickness, and this wrapped round a cylinder, and the composition has only to be kept moist and any number of impressions can be printed off on calico, velvet, or velveteen, the colors being thoroughly "fast."—*Manchester (Eng.) Examiner*.

MR. HANNAY, of Glasgow, is the inventor of a new light, which bids fair to compete, as an out-of-door illuminant, with electricity. It is produced by the consumption of a most intimate mixture of air and minutely divided oil particles. Lucigen, as the new illuminant is called, is already extensively used in large engineering works, and for lighting large open spaces, for which it is especially adapted. All that is required for the Lucigen light is a barrel of crude oil and a compressed-air engine, which transforms the oil particles into spray, and as the disintegration of the two elements is secured, a continuous bright flame is the result. Three lamps on the terrace in front of the Crystal Palace at Sydenham, lit up the whole grounds, and the oil consumed did not cost more than four cents per hour. Such is the immense volume and diffusive power of the flame that small print can be read a quarter of a mile away from one lamp. Two of the lamps having been extinguished, this was actually proved by Mr. Augustus Harris, manager of Drury Lane Theatre, who was able to read down an avenue at over 530 yards from the lamp. The utility of Lucigen for out-door purposes may be gauged by its victories. Besides being used for lighting many large engineering works, and such places as the Armstrong and