

gradually improving his position. His liabilities appear to be about \$7,000, with assets of about \$8,000. The cause of the trouble seems to be an overstock of goods and scarcity of business. Owing to the depression he could not realize on his goods fast enough to meet his liabilities as they matured and having got some \$400 behind with his rent, his landlord closed him up. At a meeting of his creditors held last week, it was decided to refuse Mr. Gowland's offer of 50 cents on the dollar and close his business out. While we are sorry for the losses sustained by the creditors, we must confess to a strong feeling of sympathy with Mr. Gowland, whom we have always regarded as an honest and hard working man. Cheap credit seems to have been the rock upon which he wrecked himself, and it was probably owing as much to the pressure from the wholesale trade as from his own desire to carry a large stock, that he overbought himself and thus put a stop to his mercantile career. As we have more than once remarked, there are cases in which it is better to have too little credit, than too much and Mr. Gowland's seems to be one of them.

AN UNCALLED FOR STRIKE. We are informed by an exchange that among the numerous labor complications of last month, was a strike of all the clocks of the Howard Clock Company. An indignation meeting was first called at which a venerable old town clock presided, while the dial acted as Secretary and recorded the minutes of the proceedings. The dial announced the object of the meeting to be a protest against their treatment by the company. They were required to work twenty-four hours a day, and, instead of being paid in cash, they were "on tick" all the time. Not only were their days full of labor, but theirs were Nights of Labor also. They did not object so much to long hours as they did to the introduction of machinery into their insides, and there was danger of their being ruined by machine work. The dial added that he thought all the hands should be compelled to join the union and not swing around the circle wasting their quarters and halves so much, obeying every motion of that promoter of discord the pendulum. The dial grew white with eloquence and indignation, and the hour hand complained that the minute hand was altogether too fast and not a fit associate for him, but the dial exclaimed that "that had nothing to do with the case." Other members chimed in, and after a long discussion at precisely twelve o'clock P.M. it was resolved to strike. Every clock joined with the movement and the strike was unanimous, and they continue to strike every hour with great regularity some of the more impetuous ones striking every fifteen minutes. Mr. Pierson the New York manager says that this strike will not interfere with his filling orders promptly, for the company always has a large stock of clocks on hand that can be depended upon to do their duty with accuracy and promptness.

SECESSION.—The politicians down in Nova Scotia seem to have worked up quite an excitement about the injustice their Province is laboring under by being in the Canadian Confederation. The elections just held show a return of 30 Secessionists and 5 Unionists which would look as if that Province meant business when they talk about leaving the Union. However, their bark may be worse than their bite, and we have no doubt but that a "little better terms" will keep them quiet for some time. If anything were wanted to give point to our editorial on political muddlers, this election would amply furnish it. This Secession cry was got up by the Liberals of that Province simply as a catch cry and by loud talk they persuaded the people that if they get out of the Canadian Union and had Commercial Union with the United States (in plain English become annexed to the U. S.) that they would at once become prosperous and happy and the goose would hang so high that the poor mechanic and the farmer would scarcely have to work at all in order to live in affluence. Well the "cry" took with the result above noticed, and now the winners are in a fix what to do. They know that going from Canada to the United States (even if they were allowed to go) would be like going from the frying pan into the fire but having raised the devil they will have to do something to keep him quiet. We shall watch the developments of the Secession party with a great deal of interest. In the meantime the *Globe*, which professes to be loyal to Canada, even although it is disloyal to the land of its birth and the party that brought it into existence, is shouting itself hoarse at this Secession victory as a veritable liberal triumph. If this is a sample of the fruits the *Globe's* liberalism, then we say "God save Canada from any more of it," for a very little of it goes a long way.

WORKSHOP NOTES.

TO RESTORE DISCOLORED PEARLS.—Set pearls which have become discolored by wear may often be improved by placing in a covered vessel, with a mixture of whiting, ammonia and water, and permitting them to remain a few hours.

TO WHITEN IVORY THAT HAS BECOME YELLOW.—Slack some lime in water. After pouring off the water from the deposit, boil the ivory in this water until it has become white. To polish, put the article in the lathe, if it is a piece that can be turned, and if not, first rub it by hand with powdered pumice stone and water, and then polish with a rag or soft leather dipped in olive oil mixed with whiting.

The *Scientific American* replying to J. M. M., who inquires how to make or mix the acid used for etching on steel plates for printing says: Iodine, 1 oz., iron filings $\frac{1}{2}$ dr., water 4 ozs. Digest till the iron is dissolved. Or pyroligneous acid 4 parts, alcohol 1 part, mix and add 1 part double nitric acid (sp. grav. 1.28). Apply from 1 $\frac{1}{2}$ to 15 minutes. Dilute nitric acid is frequently used alone with satisfactory results.

HECTOGRAPH OUTFIT.—For the pad 100 parts of good, ordinary glue, 500 parts of glycerine, 25 parts of finely powdered baric sulphate, or the same amount of kaolin, and 375 parts of water. For the copying ink a concentrated solution of Paris violet aniline is recommended. To remove the old copy from the pad, a little muriatic acid is added to the water, washing it gently with this liquid by means of a soft rag after ward using blotting paper for removing superfluous moisture.

PAPER FOR WRAPPING UP SILVER.—The following formula is given for making paper for wrapping up silver. Six parts of caustic soda are dissolved in water until the hydrometer marks 20° Baume. To the solution add four parts of oxide of zinc, and boil until it is dissolved. Add sufficient water to bring the solution down to 10° Baume. Paper or calico soaked in this solution and dried will effectually preserve the most highly polished silver articles from the tarnishing action of the sulphuretted hydrogen which is contained in such notable quantities in the atmosphere of all large towns.

The following is Stolba's process for nickel plating without a battery. Into the plating vessel—which may be of porcelain, but preferably of copper—is placed a concentrated solution of zinc chloride, which is then diluted with from one to two volumes of water, and heated to boiling. If any precipitate separates, it is to be redissolved by adding a few drops of hydrochloric acid. As much powdered zinc as can be taken on the point of a knife is thrown in, by which the vessel becomes covered internally with a coating of zinc. The nickel salt, either the chloride or the sulphate is then added until the liquid is distinctly green, and the articles to be plated, previously thoroughly cleaned, are introduced together with some zinc fragments. The boiling is continued for fifteen minutes, when the coating of nickel is completed, and the process is finished. The articles are well washed with water and cleaned with chalk.

THE ELECTRO-CHEMICAL EQUIVALENT OF SILVER.—In the *Journal de Physique*, M. Mascart has an article in which he gives an account of recent experiments undertaken by him to determine the weight of silver deposited or dissolved during one second by a unit of currents. Some few months ago he arrived at the conclusion that the quantity was 11.24 m g. Kohlrausch gives 11.36, and Lord Rayleigh 11.19. Since these determinations F. and W. Kohlrausch, by a fresh series of experiments, have found it to be 11.183, and Lord Rayleigh has recently, March, 1884, made it 11.18. Accordingly, M. Mascart thought it necessary to re-verify his calculations, and acknowledge that he was deceived. Without going into his calculations, we may say that he now gives his result as 11.156 m g. The chemical action of one ampere per second, or of one coulomb will, therefore be, says M. Mascart. According to Kohlrausch 1.1157 m g. of silver dissolved. According to Rayleigh 1.118 m g. of silver dissolved. According to Mascart 1.1156 m g. of silver dissolved.

FICTITIOUS GOLD.—Eight ounces of cream of tartar are gradually heated to redness in a crucible, and a little clay, pulverized saltpetre is then thrown upon it, both will fuse into a yellow substance, which is left to cool. On the other hand, eight ounces of pure copper are