

Poor

Effects of Free Trade.—The session of Sir R. Peel's tariff is beginning to tell most disastrously on the glove trade. The plate glass workers in Lancashire, who are not yet organized, are also, but are absolutely on the decline, and we are informed that foreign competition in that article has already turned the tables against the English manufacturers, and has compelled him to diminish the number of his workmen, and to turn to the exportation of his goods. So much for the action of organized labour against labour heavily taxed. Cast goods, of delicate workmanship, formerly made in Birmingham, are now sent to America, and the manufacturers have struck off the tag.

This may seem like carrying

"cows to Nov.-Asia," but it nevertheless is a fact.

The Protectionist Cause.—We understand that in Monmouthshire, the Protectionists have increased their previously large majority by about one vote; and that the whole of the League is expected to do the same throughout the country.

The Haydon Fund subscription has now reached £2200.

A HUMAN STAR.—Mr. George Brown, a public officer in New Haven, has organized the numerous courses of instruction of which this office gave a knowledge, is the following—in a narrow court of four small dwellings on each side, with private at each end, is a star to set a common room, and the following inhabitants:—A wife and her son grow to a dog, a cat, a mouse, a hen, a cock, a hen, a cock, two dogs, three hens, and a roost of fowls. The unfurnished bipeds all littered in upper rooms, the dogs and fowls below. The houses earned on making winter maps. The housewife earned

one to such a point as to make a kennel!

PREACHING TO THE DEAD AND DUMB.

It may not be generally known to the metropolitan public, that there has been for some time past, a chapel in Red Lion Square, in which public worship is performed twice every Sunday for the sole benefit of the dead and dumb. The service is that of the Church of England—singing and the music of the organ being, as a matter of course, omitted. The experiments of communicating to those unfortunate persons deprived of hearing and the power of speech, a knowledge of the great truths of revelation, by means of those "signs" which constitute a language in themselves, have been eminently successful. In the morning, the chapel in Red Lion Square is attended by from 20 to 30 deaf and dumb persons. Last Sunday evening the audience consisted of 17. After the usual prayers had been gone through, the teacher commented at considerable length, by means of gestures, on the 11th chapter of the 1st of Samuel; his audience seeming to comprehend every idea which he sought to convey. The services lasted for upwards of an hour and a quarter.

The John Bull states that circumstances have recently transpired which lead to an expectation that the large sum of money stolen from Messrs. Rogers and Company's may yet be retrieved, at least the notes. That the whole of the notes, to the amount of £10,000 are still in existence, has been satisfactorily proved by the fact, that, a few days since, a one-pound note, the number of which does not appear in the list published and circulated,

at the time, was banking seating the receipt in the newspaper notes would be payment of £10,000.

It was accordingly compiled w...

...to the company that has not been entertained.

The French Frigate "La Provocante," and the French gun-boat "La Chevre," sailed on Tuesday morning from their anchorage in Leith Roads. While proceeding on different tacks, they fell foul of each other, when the Frigate sank the lighter vessel in 25 fathoms of water.—The unfortunate collision took place at the entrance of Dunbar harbour. We understand that four lives were lost, the rest of the crew of the Chevre being picked up by the boats of the Frigate.—*Edinburgh Chronicle.*

[From the Boston Daily Advertiser]

GUN COTTON.

No chemical discovery has excited so much interest generally as M. Schonbein's account of this inflammable compound, and the supposed changes it may cause, in its application, as a substitute for gunpowder. M. Schonbein is at the present moment, an applicant for a patent right, in this country for the manufacture, while processes have been published in Europe and here, for obtaining a similar substance, M. Otto, indignant at the course pursued by M. Schonbein in slaking his public scientific character, by telling to the highest bidder his discovery as a secret, instituted experiments which resulted in the discovery of a mode of production which he published. Partial details of his process have appeared in our papers, but no full directions have as yet been given for preparing the true Gun Cotton. It is proper and just that this discovery should be open to all nations, and become the subject of competition among manufacturers, that the advantage of this substance may be fully learned. I am indebted to Mr. Wachter, Esq., of this city, who is now residing at Berlin, for the European intelligence respecting it, and to J. E. Teschemacher, Esq., for accounts from England. Otto's process as published, was imperfect, inasmuch as the acid used was not described; and neither time nor temperature given. The forming Nitric Nitroso Acid was used by him, and only thirty seconds time allowed for action, to be completed. This would not often be the result, and takes place only with the very volatile acid first obtained by distillation. Dr. Wachter modified this process by using a mixture of the strongest nitric and sulphuric acids, two parts of the latter to one of the former, by weight.

In England the process, in which the manufacturer is based, was also described, and equal weights of the two acids are preferred. Experiments which I made, indicated that a mixture of the two acids gave certainty to the operation, and the Gun Cotton was produced a few hours before the accounts of success elsewhere had reached me. The principle is the exposure of cotton or

fibrous substances having the composition of woody fibre to the action of nitric acid, under circumstances allowing the elements of water in the cotton, to be exchanged for oxygen and nitrogen from the nitric acid. It will be at once seen that the explosive compound has nearly the same composition as gunpowder, if the base of the nitre and the sulphur ingredients of the latter be omitted. In the Gun Cotton, however, the fixed or earthly ingredients have been all dissolved out, and the only base is hydro carbon, which is entirely consumed.

In the best prepared cotton not the slightest smoke of residue remains after the inflammation. Mr. Teschemacher, of London, has found that the cotton becomes more than one half heavier in the manufacture. The following is the process devised here; Cotton, which has been carefully dried, must be picked free from dirt and knots, and extended in water—Nitric Acid Sp. Gr. 1.05 to 1.10; I part Sulphuric Acid (9l. Vitriol) Sp. Gr. 1.85, two and one-half parts. Mix the acids in a current of air for removing the dense fumes, and dip and stir the flocks in the fluid. The temperature of the mixture at first will be 125° F. and it should be maintained as high during the operation. After the lapse of thirty or forty minutes, press the sooty cotton between glass plates until it becomes transparent, the flocks apart so as to readily wash the greater part of the acid. The flocks must then be washed in different waters, till every trace of acid is removed and dried to fire size below 125° F. The same quantity of acid will answer for successive flocks, till half consumed.

Forwards, the cotton is dried by the sun, which is said to be a good expedient.

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