

FOREIGN SUMMARY—METALS AND MARKETS.

The price of gas in most of the cities of Great Britain is less than one half that of New York. In London it is only four shilling sterling (not quite a dollar) per 1,000 cubic feet. Mr. Flintoff, in delivering a lecture on this subject recently in Glasgow, stated that, while five shillings per 1,000 cubic feet were charged in the Scottish city, or one shilling more than in London, the coal was one shilling less in price; thus proving that companies which had the monopoly only regarded their own interests and made all they could out of the people. He asserted that gas-making was not that mysterious operation some imagined, and that a new company could manufacture gas in Glasgow with a reasonable profit, at two shillings and eleven pence per 1,000 cubic feet, not one-third the price of New York gas.

Messrs. Burns, of Glasgow, the principal stockholders of the Cunard steamers, are perhaps the greatest steamship proprietors in the land. They have lately contracted, in conjunction with Mr. Mac Ivor, of Liverpool, another proprietor, for six new large iron screw steamers, four for the Mediterranean service, and two for the Glasgow and Liverpool trade. Besides these, they have also either four or five still larger steamships in the course of construction for the Atlantic trade between Liverpool and American ports.

A new screw steamer, called the *Thetis*, of 680 suns burden lately made the passage between Greenock and Liverpool, burning only 1,018 lbs. of coal per horse power, per hour. No less than four and five lbs. are generally consumed in steamers per horse power.

Returns of the mineral wealth of England for 1859 have just been published. It amounts to £31,250,000 sterling in value. Of coal there were 65,008,649 tons raised, of iron, smelted from the ore, 3,456,064; copper, 14,456; lead, 68,303; tin, 6,920; silver, 569,345 oz. The yield of copper ore was 226,852 tons.

A great trial of reaping-machines, recently took place in Belgium on the very field where the famous battle of Waterloo was fought. It was announced beforehand that 26 machines would compete for the prize, but only four entered into the contest. These were Burgess & Key's (McCormick's), Bell's (Scottish), J. A. Teelan's (Hussey's), and Cranstoun's (Woods). These were all American reapers, with one exception. The prize was awarded to Bell's, and this gave great dissatisfaction to most persons present, because it was held to be inferior in many respects to two of the others. It cut the grain (oats) very well, but it could only be turned with great difficulty, and was not very manageable. It laid the cut grass beautifully in swaths, and this appears to have been the main merit which it possessed. Burgess & Key's machine was of superior construction, and in a subsequent trial (not for a prize) it cut a field of trefoil, which Bells had failed to do, and the machine was instantly purchased by one of the jury who had awarded the prize to the Bell machine. These statements are taken from the Brussels Messenger.

In several of the seaports in England schools have been provided for training boys for the mercantile marine. The government has given the old frigate *Conway* to Liverpool for a school, and great efforts are being made to elevate the character and qualifications of the common sailor. Hitherto such efforts have been confined to government-dockyards, in training youths for the navy. The low character which sailors have acquired in American ships, by our ship-owners employing the scum of all nations, forcibly calls for some great effort to revolutionize our entire mercantile marine, and a school for training boys in New York should be tried to see what effect it will produce. We think it would work well, if conducted upon correct principles.

It has been announced that a great reduction was about to take place in the French tariff on foreign metals, and hence we find that, as a consequence, pig-iron has become firm in expectation of a large demand from France. The prices in our table are unchanged since our last, but in consequence of reports that Louis Napoleon is in favor of free trade, great expectations have been excited among the metal-workers of Sheffield and Birmingham in regard to large demands soon to be made for their cheap manufactures.

American candles, with S. R. Weeden's wick, manufactured at Providence, R. I., are on the track of British tallow candles, with Palmer's patent wick, in South

America, and beginning to supersede them in some instances. The wick in these candles is self-consuming, and requires no snuffing—a very important improvement in tallow candles.

PRICES OF FOREIGN METALS, SEPT. 5.

Table with columns for metal types (Iron, Steel, etc.), unit (per ton, etc.), and price in £ s. d. and £ s. d. formats.

[The above are prices within three per cent discount, the pound being valued at \$4.85.]

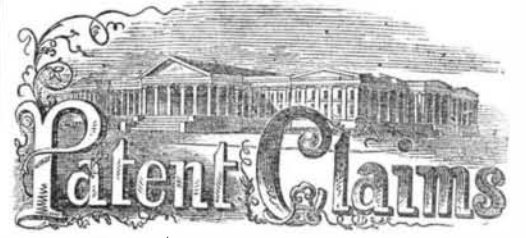
New York Markets.

Table listing various market commodities such as Coal, Cotton, Flour, Glass, Hemp, India-Rubber, Indigo, Iron, Lead, Linseed, Resin, Spelter, Steel, Tallow, Turpentine, and Zinc, along with their prices and descriptions.

The demand for flour has been somewhat more lively during the past week.

There was a large supply of fat cattle during the week, 5,930 having been received mostly from the West, and they sold as low as 8½c. a 9c. per pound.

A circular issued from the office of the Shipping and Mercantile List, No. 58 Pine-street, contains a statement of our total cotton crop for the year ending August 31st. The crop of Sea Island was 49,089 bales against 40,566 in the previous year, and the increase of the entire crop of all kinds for the year was 707,918 bales.



ISSUED FROM THE UNITED STATES PATENT OFFICE FOR THE WEEK ENDING SEPTEMBER 13, 1859.

[Reported Officially for the SCIENTIFIC AMERICAN.]

* * Pamphlets giving full particulars of the mode of applying for patents, size of model required, and much other information useful to inventors, may be had gratis by addressing MUNN & CO., Publishers of the SCIENTIFIC AMERICAN, New York.

25,375.—Henry Adams, of New York City, for an Improvement in Saddle-trees: I claim a tree for side or ladies' saddles, constructed by connecting the bars, A A, by a bridge, B, at the point specified, and with an open space, a, between the front ends of the bars, at their junction with the horns, C D, for the purpose set forth.

25,376.—Geo. S. Avery, of Cross River, N. Y., for an Improvement in Rails for Railroads: I claim an improvement in railroad iron bars or rails by an offset or bend, made in one end of the rails, and the lapping on of the other end of the rails, and inserting a key between them at the lap, and riveting or bolting them together, substantially as and for the purposes described.

[An engraving and description of this invention will appear in our columns in the course of a few weeks.]

25,377.—O. S. Bartlett, of Romulus, N. Y., for an Improvement in Ditching-plows: I claim the combination of the arms, D D D, brace, H, rods, d, d, and blocks, F, substantially as and for the purpose set forth. I also claim the mode of attaching and adjusting the shares, E E E, by means of the packing blocks, I, I, in combination with the bolts b, b, and arms, D D, substantially in the manner specified.

25,378.—A. F. Blunk, of Indianapolis, Ind., for an Improvement in Straw-cutters: I claim a straw cutter, constructed as shown and specified, that is to say, with angular knives, T, arms, K, wheel, E, feed rollers, B C, and D, slides, P, S, springs, O, band, N, pulleys, J, J, and endless belt, I, when these several parts are constructed and arranged to operate conjointly, as and for the purposes described.

25,379.—E. K. Breckenridge, of West Meriden, Conn., for an Improvement in Window-sash Fasteners: I claim the employment or use of two cams, B B', placed on a common arbor, h, with a spring, E F, applied to them and a lever, C, the whole being fitted within a frame, A, and arranged to operate substantially as and for the purpose set forth.

[This invention consists in placing two cams on a common arbor, and connecting both by a single spring, the parts being placed in the sill of the window casing, and in such relation to the sash as to bear against its edge; one cam retaining the sash in an upward position, at any desired height within the scope of its movement, and consequently opposing a downward movement, and the other cam opposing an upward movement, and thereby retaining the sash in a downward position, either cam being moved or adjusted when required, for the purpose of raising or lowering the sash by means of a lever.]

25,380.—Z. B. Brown and M. C. Godard, of Granby, Conn., for an Improvement in Seed-planters: We claim the arrangement and combination of the carrier and stamping wheels F, F, cams and marker device I, upon the wheel F, the reciprocal levers, H H, seed slides or valves, D D, hoppers, B B, drill formers, J J, and covering shares, K K, substantially in the manner as and for the purpose described.

25,381.—J. S. Buell, of Buffalo, N. Y., for an Improvement in Sewing Machines: I claim, first, in combination with the stationary corrugated surface, O O, the corrugated foot-piece, Q, constructed, arranged and operating therewith, as set forth. Second, I also claim, in combination with the needle or its thread, the conical spool, X, and guide, Y, for causing the slack in the thread to form the loop, and holding said loop from turning until seized by the looper, as set forth and explained.

25,382.—Stephen Burrows, of Lima, Wis., for an Improvement in Seed-drills: I claim the employment of a grooved ring, B C, fitted on the axle or shaft of a seed drill, in combination with the peculiarly constructed tube, D E, leading from the hopper into the groove of the ring, substantially as and for the purposes set forth.

25,383.—Wm. Campbell, of Waterloo, Pa., for an Improved Churn: I claim the perforated and hinged floats, F, as an improvement in the construction of dasher-heads for churns.

25,384.—Rosanna Carpenter, of Medford, Mass., for an Improvement in Extracts of Fruits: I claim, as a new article of manufacture, the above-described extract of fruit, prepared in the manner substantially as specified.

25,385.—R. P. Clark, of Johnstown, N. Y., for an Improvement in Handmills for Grinding Apples, &c.: I claim the described improved handmill for household use, in reducing apples, potatoes, and other fruits and roots to pomace; the teeth, e, l, of the combined cylinder, and adjustable yielding concave being formed and arranged in the particular manner set forth.

25,386.—Barnes Clayton, of Philadelphia, Pa., for Improved Fasteners for Shirt Studs: I claim the hollow sliding case, A, and spring, B, in combination with the tie, or post, E, and the bar, D, the same being arranged to operate together, substantially in the manner and for the purpose set forth and described.

25,387.—P. S. Clinger, of Conestoga Center, Pa., for an Improvement in Wire Fences: I claim the combination of the pin, S, with the ratchet, T, in connection with the mortised posts, and the hooked wires, H W, when these several parts are arranged substantially as described for the purpose set forth.

25,388.—T. T. and H. W. S. Collier, of Laverna, Texas, for an Improvement in Cotton-seed Planters: We claim the arrangement of the distributor, B, and the stirrer, H, constructed as described, to operate in combination with the packing wheel, I, substantially as and for the purpose set forth. [The principal object of this invention is to obviate the difficulty of distributing cotton-seeds evenly from a hopper. For this purpose there is arranged in the hopper a stirrer made of rods of iron which pass through disks at the end which hinder rotation about the axis]