

FOREIGN SUMMARY—METALS AND MARKETS.

An American—Wm. H. Ward, of Auburn, N. Y., the inventor of the bullet-machinery described on page 36, Vol. XII., SCIENTIFIC AMERICAN—has been exhibiting a new system of naval signals before the British Admiralty Board. He has been highly complimented for the completeness of the invention, and it is believed that it will be adopted for the British navy.

The ship-building business in England is very active at present, both in the government and private dock-yards.

The Cunard Company have sold their line of iron propellers, which had been employed for carrying heavy freight between England and America, to the Spanish government. They are to be replaced by vessels of a larger class. This company also intends to add another large ship, called the Scotia, to their mail line. It will be made of iron, and of greater capacity than the Persia. It is not yet decided whether it shall be propelled by a screw or paddle-wheels. It is to be desired that the screw may be adopted, in order to test its qualities fairly in a first-class ship. Hitherto, all screw steamers have been furnished with engines of much less power in proportion to their tonnage than paddle-wheel steamers.

A colossal statue of Hugh Miller, the stone-mason, geologist and editor, is about to be erected in his native place, Cromarty, Scotland. A new statue of John Hunter, the celebrated surgeon and anatomist, is also proposed to be erected in London. These are honorable memorials to the memory of scientific men.

A meeting of scientific gentlemen was lately held at North Woolwich, for the purpose of discussing the merits of india-rubber as an insulating substance for telegraph cables. Mr. West stated that a telegraph-wire insulated with india-rubber had been in use across the harbor of Portsmouth since 1846, and that its insulation was still perfect. It was also stated that gutta-percha was a failure for telegraph-wires on land and in the sea; that it was not such a good material as india-rubber for insulation, but it was easier to apply it to the wires.

There was a great trial at Ipswich, July 6, with Fowle's steam plow and Smith's steam cultivator. The former plows up the soil in furrows, according to the common method; the latter smashes up the soil, and is a "rotary." It is drawn by a windlass, worked by a band attached to the driving-wheel of a small, high-pressure portable engine. Its cost, with ropes and all the apparatus, is only about \$1,050. It was generally admitted that steam-plowing was becoming a necessity, just as much as reaping by machinery.

Towing by small steamers has just been introduced on the Leeds and Liverpool Canal, four steam-tugs being employed for this purpose. Each boat is 60 feet long, 8 feet beam, has a tubular boiler, engines of 12 horse-power, and a screw-propeller driven at the rate of 180 revolutions per minute. These boats are solely employed for towing on the canal, and they do the work for 25 per cent. less than has been charged for horse-haulage.

PRICES OF FOREIGN METALS, AUGUST 4.

Table with 2 columns of metal types and their prices in £ s. d. format. Includes items like Iron, English Bar, Steel, Russian C. C. N. D., Lead, British Pig, etc.

New York Markets.

COAL.—Foreign cannel, \$9; Anthracite, from \$4.50, \$4.75, to \$5. CORDAGE.—Manilla, 8 1/2 c. a 8 3/4 c. per lb. COTTON.—The sales were more favorable this week, still the prices have somewhat fluctuated. Good ordinary Upland, Florida and Mobile, 9 1/2 c.; Texas, 10 c.; Middling fair from \$13 1/2 c. to 14 c. COFFEE.—There has been a considerable advance in the prices of this metal. Lake Superior ingots at 23 c. per lb. for cash; sheathing, 26 c. FLOUR.—There has been a slight upward tendency of prices. Southern flour has been buoyant, but on the whole, between one day and another, the market may be set down as fluctuating. Genesee brands, \$5.25 a \$3; Ohio choice, \$5.50 a \$7.75; common brands from \$4.15 up to \$6. HEMP.—American undressed, \$140 a \$150; dressed from \$190 a \$210. Jute, \$95 a \$90. Italian scarce. Russian clean, \$210 a \$215. Manila 6 1/2 c. a 6 3/4 c. per lb. INDIA-RUBBER.—Para, fine, 57 1/2 c. a 60 c. per lb.; East India, 37 c. INDIGO.—Bengal, \$1 a \$1.65 per lb.; Manilla, good to prime, 55 c. a \$1.10; Guatemala, \$1.05 a \$1.25. IRON.—Anthracite pig, \$23 a \$24 per ton; Scotch, \$24 to \$24.50; Swedish bar, ordinary sizes, \$38 a \$39; English refined, \$53 a \$54.50; English common, \$43 a \$45. Russian sheet, first quality, 11 1/2 c. a 12 c. per lb.; English, single, double and treble, 8 1/2 c. a 4 1/2 c. LEAD.—Galea, \$5.80 per 100 lbs.; German and English refined, \$5.70; bar, sheet and pipe, from 6 1/2 c. to 7 c. LEATHER.—Oak slaughter, light, 25 c. a 37 c. per lb.; Oak, heavy, 3 c. a 35 c.; Oak, crop, 40 c. a 42 c.; Hemlock, middle, 25 1/2 c. a 26 1/2 c. Hemlock, light, 25 c. a 25 1/2 c., Hemlock, heavy, 23 1/2 c. a 24 1/2 c.; Patent enameled, 16 c. a 17 c. per foot, light. Sheep, morocco finish, \$7.50 a \$8.50 per dozen. Calf-skins, oak, 62 c. a 65 c.; Hemlock, 60 c. a 65 c.; Belting, oak, 3 c. a 34 c.; Hemlock, 28 c. a 31 c. NAILS.—Cut are quiet but steady at 3 c. a 3 1/2 c. per lb. American clinch sell in lots, as wanted, at 5 c. a 6 c.; wrought foreign, 3 c. a 3 1/2 c.; American horseshoe, 14 1/2 c. OILS.—Lined, city made, 60 c. per gallon, whale, bleached spring, 54 c. a 56 c.; sperm, crude, \$1.22 a \$1.27; sperm, unbleached spring, \$1.85; lard oil, No. 1 winter, 85 c. a 90 c.; extra refined rosin, 30 c. a 40 c.; machinery, 59 c. a 100 c.; camphene, 45 c. a 47 c.; coal, refined, from \$1.12 a \$1.60. RESIN.—Common, \$1.77 1/2 per 10 lbs. bbl.; No. 2, &c., \$1.80 a \$2.12 1/2; No. 1, per 280 lbs. bbl., \$2.25 a \$3, white, \$3.25 a \$4.50; pale, \$4.50 a \$6.25. SPLITTER.—5 1/2 c. per lb. STEEL.—English cast, 14 c. a 16 c. per lb.; German, 7 c. a 10 c.; American spring, 5 c. a 5 1/2 c.; American blister, 4 1/2 c. a 5 1/2 c. TALLOW.—American prime, 10 1/2 c. to 11 c. per lb. TIN.— Banca, 33 c. a 34 1/2 c.; Straits, 32 c.; plates, \$7.50 a \$9.83 1/2 per box. TURPENTINE.—Crude, \$3.62 1/2 per 280 lbs.; spirits, turpentine, 44 1/2 c. per gallon. ZINC.—Sheets, 7 1/2 a 7 3/4 per lb. The foregoing rates indicate the state of the New York markets up to Aug. 18.

There has been a slight decline in cotton; also, in tin. But it is believed the prices of both will yet rise somewhat higher. Great efforts are now being made in England to increase the cultivation of cotton in Africa, so as to obtain it at lower prices than have ruled in the market for several years. The demand for cotton is greater than the supply, and this would be increased were the prices lowered. When it is remembered that the prices of cotton are not over one-half what they were half a century ago, the improvements in its cultivation since then must have been neither "few nor far between."

The market for most qualities of wool is very quiet. The holders are not anxious to sell at present prices, and much caution is exercised in buying, thus showing a want of confidence in the existing state of things. Fine Saxony fleeces sells at 56 c. to 60 c. per lb., American merino at 35 c., 40 c. and 45 c.; California fine at 25 c. to 30 c., unwashed, and common South American, 10 c. to 13 c., unwashed.

The peaches are a small crop this season, but some very beautiful lots of Jerseys have sold at \$1 to \$1.25 per basket, and Delawares at \$1.50 and \$2. The peach crop has been growing smaller every season for some years past; and where this tree once flourished in several counties in New Jersey, it is now almost extinct.

The coal trade of Pittsburg amounted last year to 54,367,632 bushels, making a total of 2,064,594 tons. Two-thirds of this amount were exported by boats and railroads to other sections.

The American Horse Nail Company, of Providence, commenced the manufacture of horse and ox shoe nails about six years since, by patent machines, which work with great speed and accuracy, producing from each, with the labor of a man and boy, as many nails as 50 men can make by hand per day. They are formed by pressing the iron into proper shape between dies while at a welding heat.

According to a statement of Mr. E. Howe, the number of sewing-machines sold in this city during the past year, ending April 30, was 37,442. The increase has been over 100 per cent. in the six months ending October, 1858, and it is believed that this increase will be more than doubled during the next twelve months, making the number about 75,000.



ISSUED FROM THE UNITED STATES PATENT OFFICE FOR THE WEEK ENDING AUGUST 16, 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.

25,083.—G. L. Bailey, of Portland, Me., for Improved Machines for Punching Holes in Leather: I claim, first, The arrangement and combination of the bed-piece, L, lever, A, and hollow cutter, C, provided with a standard, D, connecting rod, E, and treadle, H, as and for the purpose set forth and described. Second, I claim the arrangement, as set forth, of the circular adjustable cutter-bed, D, in such a relative position to the cutter, C, as to accomplish the object specified.

25,084.—Wm. T. Barnes, of Buffalo, N. Y., for an Improvement in Sewing Machines: I claim, first, Working the needles vertically and alternately in the same hole in the bed plate, substantially in the manner and for the purpose set forth. Second, I claim the arrangement of springs, 5 and 7, wedge, 10, finger, 6, spring, 13, and stop, 20, substantially in the manner specified. Third, I claim the arrangement of lever, 13, slide, 11, and lever, 12, when said lever, 12, is provided with points, is pivoted to slide, 11, and made to operate substantially in the manner described. Fourth, I claim the arrangement of the ratchet wheel, a, serrated bar, c, and ratchet, e, with the spool-rod, and levers, C, C', substantially as set forth.

25,085.—Mellen Battel, of Albany, N. Y., for an Improvement in Steam Generators: I claim the combination with the tubes, C, C, extending downward through the tube sheet, or crown of the fire-box or downward into a flue, and upward through the water above the tube-sheet, of the inner tubes, D, D, applied in the manner described for the purpose set forth.

25,086.—T. D. Berry, of Lowell, Mass., for an Improved Clothes Rack: I claim the construction of my clothes rack, with divided center, or of two sections, each to consist of center-piece, A, slats, F, braces, H, and circumferential pieces, E, united to each other as described, when these two sections are combined with each other by plates, C, so hinged as to allow the rack to be folded and opened, both vertically and circumferentially, in the manner described, to obtain by this divided center, a rack suitable for use, when, folded, closely and circumferentially for the purposes set forth.

25,087.—E. Booth, of Troy, N. Y., for an Improvement in Sewing Machines: I claim, first, The combination of an eye-pointed vibrating lever, and a looper, operating together substantially in the manner and for the purpose set forth. Second, I claim the vibrating of the eye-pointed lever by a positive motion given to it by the rollers, t, t', crank, and, as contradistinguished from the use of a spring of any kind, by which means I ensure its reliable action under its rapid motions as set forth.

25,088.—Maro Bradly, of Dundee, Ill., for an Improvement in Horse-rakes: I claim the use of the recessed metal bar, b, spurs, E, F, rods or shoes, B, elastic bar, I, lever, J, slide-rod, K, and projection, G, the whole being constructed and employed together, in the manner and for the purpose substantially as described. [This invention relates to an improvement in that class of horse-rakes in which wire teeth are used. The object of this invention is to render such rakes more durable than hitherto constructed, lessen the draft very considerably, and also facilitate the turning and general manipulation of the machine, and at the same time form compact windrows.]

25,089.—J. D. Browne, of Cincinnati, Ohio, for Improved Cabinet Furniture: I claim the arrangement of the folding ends, C, C', as set forth, and the flaps or leaves, E, E', hinged on the inside, for the purpose substantially described.

25,090.—Henry Burt, of Newark, N. J., for an Improved Door-fastener: I claim a permanent door-bolt made with the fastening plate, b, bolt-case, a, and bolt, c, secured and operated as described.

25,091.—Joseph Calef, of Buffalo, N. Y., for an Improvement in the Running Gear of Carriages: I claim the journal box, F, constructed substantially as described, and combined with the friction rollers, B, or slides, W, for the purposes set forth. The combination of the axle, A, journal-box, E, friction rollers, B, and equivalents, and hub, D, for the purposes set forth. The arrangement of the jointed braces L M N, in combination with the running gear of carriages, for the purposes set forth.

25,092.—Wm. S. Carr, of New York City, for an Improved Water Closet: I claim regulating the action of the cock or valve in water closets by the joint operation of the lever and weight of water in the pan, substantially as specified, whereby the cock or valve is kept open until the weight of water in the pan regulates the closing thereof. I also claim the construction of the valve, c, with the balancing diaphragm, 12, valve, 10, and spring, 13, as set forth.

25,093.—H. Chauncy, of Perry, Ga., for an Improvement in Machines for Dressing Stone: I claim the arrangement of the pick or hammer shafts, N N, adjustable shaft, P, and adjustable traverse bar, P, when combined or used in connection with the reciprocating carriage C, and laterally moving, or adjustable bed, U, in the manner and for the purpose set forth.

25,094.—A. H. Clear, of Providence, R. I., for an Improvement in Pipe Connections for Steam Boilers: I claim making the connections between the injection pipe or other similarly submerged pipe of a steam vessel, or any other vessel, with the side or exterior of the vessel, by means of a valve box situated within or between the inside and outside planking of the vessel fitted with a valve, capable of being operated by a screw, or its equivalent, by a person on or above the deck of the vessel, substantially as described. [The liability to bursting or breakage of the injection pipe or pipes or other submerged pipes is an ever-present source of danger on board steam vessels, and in other vessels there are frequently submerged