

in comparison with tallow or any of the animal oils. We have seen pure olive oil applied to good leather—almost new—and it soon became hard and brittle, and cracked very much like the harness leather described by our correspondent.

Another correspondent, writing to us from Philadelphia, casually alludes to this subject, and points out an advantage secured to him from allowing boots to stand for several months before he uses them for common wear. He says:—"By long practical experience I have learned that a pair of boots which cannot be put on when new without great discomfort to the feet, if left for a year in a dry place, may be readily put on and worn with the greatest comfort. I have frequently seen boots, when laid aside, become green as verdigris with mold. I suppose this was owing to the blacking on them, and as the dry-rot mentioned in the SCIENTIFIC AMERICAN commenced at the seam, I think it must be caused by some application applied to the leather at the seam, when the boots are being sewed. I always dread a newly made pair of boots, and prefer to lay them aside for six months or a year before I wear them, so as to insure comfort from the first moment."

WEEKLY SUMMARY OF INVENTIONS.

The following inventions are among the most useful improvements patented this week. For the claims to these inventions the reader is referred to the official list on another page:—

TUFTED OR PILED WORK.

The operation to make tufted or piled work by hand, and with the assistance of the worsted pattern alone, is very tedious. Even balls and other smaller articles usually produced in this line of work, if the same have to be made by hand or in the usual manner, take up a great amount of time and labor, as each single thread has to be brought to the proper position for each piece of work. The operation of producing a number of articles from the same pattern at once, and without requiring a fresh adjustment of the thread, has been attempted; but it has hitherto failed because no provision was made to properly separate the various articles after the threads were arranged. This difficulty is completely obviated by the present invention, and all sorts of tufted work can now be produced in any number from the same pattern at one and the same operation. E. Kellerman, of Moosop, Conn., is the patentee.

SHINGLE MACHINE.

The object of this invention is to obtain a machine by which shingles may be sawed from the bolt in proper taper form and the taper varied as may be required, the machine also admitting of "stuff" being sawed with parallel sides such as are used for the heading of casks and other similar purposes. The invention also has for its object an automatic feeding and gigging-back device, so arranged as to operate conjointly with the bolt-adjusting mechanism and form throughout a simple and efficient device. The invention has further for its object the presenting of the bolt to the saw in such a way as to insure an easy and smooth cut, without tearing the fiber or rendering the saw liable to work off from the bolt. The credit of this contrivance is due to David Nicholson, of Lockport, N. Y.

WATER METER.

This invention consists in constructing a mouth-piece or break-water with any suitable number of outlets through which the water is allowed to escape, excepting at one of the outlets, without being measured by the tilt-box, or effecting it in any way, so that where a large quantity of water is used, only a given amount of this will be registered, from which the entire amount can readily be computed. It further consists in enclosing the above-described mechanism within an air-tight casing furnished with a secondary receptacle, and an air-cock by which a regular current or flow of water may be kept up, however varying may be the pressure of the head or source, and by which the mechanism may be kept in good working order. This improvement was designed by E. P. and J. N. Farrar, of this city.

ACOUSTIC APPARATUS.

This invention consists in providing a funnel-shaped receiver within a church pulpit or reading desk or in a table placed in any building or room, and a pipe leading from the throat or bottom thereof either under or above the floor, with one or more branch pipes or tubes leading therefrom to any pew or pews or seat or seats or to any

place in the church, building or room, for the purpose of conducting the voice of a minister, lecturer, reader, or speaker or other sound to the ears of any person or persons whose sense of hearing is imperfect or impaired. The patentee of this invention is David D. Stelle, of New Brunswick, N. J.

BORING AND MORTISING MACHINE.

This invention relates to an improved machine designed for mortising large timber for framing and consequently wherever an auger is required, in connection with a chisel in order to form the mortising. The object of this invention is to combine the auger and chisel in such a way that either tool may be applied to its work when desired with great facility, and the machine readily secured to the timber. This device has been patented to J. M. Kendall, of South Hardwick, Vt.

SOLDERING-IRON.

This invention consists in constructing the soldering-iron in such a way that the gas introduced into the implement may be burnt at the exterior of the same, so that the implement may be heated more economically and with even greater facility than by the usual charcoal fires. The credit of this contrivance is due to A. Burbank, of Brooklyn, N. Y.

FOREIGN NEWS AND MARKETS.

M. Kuhlman, of Paris, a distinguished chemist, asserts that the use of iron as ship fastenings is one of the chief causes of early decay in the wood. He considers that iron nails and spikes act the part of carriers of oxygen into the timber to promote slow combustion.

Screw steamships, of the same size as paddle-wheel vessels, have generally been built with engines of much less power. It has long been held by many engineers that, if such steamers were furnished with engines of a proportional power, they would surpass paddle-wheels in speed. The question is about to have its proper solution. The Cunard company has lately purchased the *Australian*, which is a Clyde-built screw steamer of full power, and she is to take her place as one of their line. She is built of iron, is 331 feet long, 42 feet wide, and has two 90-inch cylinder engines.

The steel wire mills of Sheffield are very busy at present, and the American orders on hand are somewhat extensive. The most of the wire ordered is for making wire ropes; still there are also quite a number of orders for crinoline.

The iron manufactures in England, in all their branches, are now in a very prosperous condition; and so are all the cotton interests. The whole country appears to have completely recovered from the financial panic of 1857, and trade never was better.

NEW YORK MARKETS.

BEESWAX.—American yellow, 36c. a 37c. per lb.

CANDLES.—Sperm, city, 38c. a 40c. per lb.; sperm, patent, 50c.; wax, paraffine, 50c.; adamantine, city, 18c. a 20c.; stearic, 27c. a 28c.

COAL.—Anthracite, \$4.50 a \$5; Liverpool orrel, per chaldron, \$12; cannel, \$13.

COPPER.—Refined ingots, 34c. per lb.; sheathing, 27c.; yellow metal, 20c.

CORDAGE.—Manilla, American made, 8c. a 8½c. per lb.; Rope, Russia hemp, 12c.

COTTON.—Ordinary, 9c. a 9½c.; good ordinary, 9½c. a 10½c.; middling, 11½c. a 11¾c.; good middling, 12c. a 12½c.; middling fair, 12½c. a 13½c.

DOMESTIC GOODS.—Shirtings, brown, 30-inch, per yard, 6c. a 7½c.; shirtings, bleached, 26 a 32-inch, per yard, 6c. a 8c.; shirtings, bleached, 30 a 34-inch, per yard, 7c. a 8½c.; sheetings, brown, 36 a 37-inch, per yard, 5½c. a 8½c.; sheetings, bleached, 36-inch, per yard, 7½c. a 15c.; calicoes, 6c. a 11c.; drillings, bleached, 30-inch, per yard, 8½c. a 10c.; cloths, all wool, \$1.50 a \$2.50; cloths, cotton warp, 85c. a \$1.37; cassimeres, 85c. a \$1.37½; satinetts, 30c. a 60c.; flannels, 15c. a 30c.; Canton flannels, brown, 8½c. a 13c.

DYEWOODS.—Barwood, per tun, \$18 a \$30; Camwood, \$130; Fustic, Cuba, \$35 a \$36; Fustic, Tampico, \$35; Fustic, Savanilla, \$20 a \$22; Fustic, Maracaibo, \$18.50 a \$19; Logwood, Laguana, \$22 a \$23; Logwood, Tabasco, \$21; Logwood, St. Domingo, \$14.50 a \$15; Logwood, Honduras, \$16 a \$17; Logwood, Jamaica, \$13.50 a \$14; Lima wood, \$65 a \$75; Sapan wood \$45.

FLOUR.—State, superfine brands, \$5 a \$5. State extra brands, \$5.20 a \$5.40; Michigan fancy brands, \$3.25 a \$5.35; Ohio, common brands, \$5.20 a \$5.30; Ohio, fancy brands, \$5.35 a \$5.40; Ohio, fair extra, \$5.75 a \$5.95; Ohio, good and choice extra brands, \$6 a \$6.75; Michigan, Indiana, Wisconsin, &c., \$5.25 a \$5.50; Genesee, fancy brands, \$5.50 a \$5.60; Genesee, extra brands, \$5.70 a \$7.25; Missouri, \$5.50 a \$7.50; Canada, \$5.45 a \$6.75; Rye flour, fine, \$3.75 a \$3.90; corn meal, \$3.80 a \$4.20.

HEMP.—American undressed, \$120 a \$150; dressed, from \$160 a \$200. Jute, \$95 a \$97.50. Italian, \$75. Russian clean, \$190 a \$200 per tun. Manilla, 6½c. per lb. Sisal, 5½c.

INDIA-RUBBER.—Para, fine, 55c. a 60c. per lb.; East India, 52c.

INDIGO.—Bengal, \$1 a \$1.55 per lb.; Madras, 70c. a 95c.; Manilla 60c. a \$1.10; Guatemala, \$1 a \$1.25.

IRON.—Pig, Scotch, per tun, \$25; bar, Swedes, ordinary sizes,

\$85 a \$96; bar, English, common, \$42.50 a \$43.50; refined, \$52 a \$54; sheet, Russia, 1st quality, per lb., 11½c. a 11¾c.; sheet, English, single, double and treble ¾c. a 3¾c.; anthracite, pig, \$24 per tun.

IVORY.—Per lb., \$1.00.

LATHS.—Eastern, per M., \$1.75 a \$2.

LEAD.—Galena, \$5.77 per 100 lbs.; German and English refined, \$5.60 a \$5.65; bar, sheet and pipe, 6½c. a 7c. per lb.

LEATHER.—Oak slaughter, light, 20c. a 31c. per lb.; Oak, medium 30c. a 32c.; Oak, heavy, 28c. a 31c.; Oak, Ohio 20c. a 30c.; Hemlock, heavy, California, 20c. a 21½c.; Hemlock, buff, 15c. a 18c.; Cordovan, 50c. a 60c.; Morocco, per dozen, \$18 a \$30; Patent enameled, 16c. a 17c. per foot; light Sheep, morocco finish, \$7.50 a \$8.50 per dozen; Calf-skins, oak, 55c. a 60c. per lb.; Hemlock, 50c. a 60c.; Belting, oak, 32c. a 34c.; Hemlock, 28c. a 31c.

LIME.—Rockland, 75c. per bbl.

LUMBER.—Timber, white pine, per M feet, \$17.75; yellow pine, \$35 a \$36; oak, \$18 a \$33; Eastern pine and spruce, \$14 a \$15; White Pine, clear, \$35 a \$40; White Pine, select, \$25 a \$30; White Pine, box, \$14 a \$18; White Pine, flooring, 1½ inch dressed, tongued and grooved, \$24.50 a \$25; Yellow Pine, flooring, 1½ inch, dressed, tongued and grooved, \$20 a \$22; Black Walnut, good, \$45; Black Walnut, 2d quality, \$30; Cherry, good, \$45; White Wood, chair plank, \$42; White Wood, 1 inch, \$23 a \$25; Spruce Flooring, 1½ inch, dressed, tongued and grooved, each, 22c. a 24c.; Spruce Boards, 15c. a 17c.; Hemlock Boards, 12½c. a 14c.; Hemlock wall strips, 10c. a 11c.; Shingles, cedar, per M, \$28 a \$35; Shingles, cypress, \$12 a \$33; Staves, W. O. pipe, light, \$55 a \$58; Staves, white oak, pipe, heavy, \$7.50 a \$80; Staves, white oak, pipe, culls, \$30 a \$35; Staves, do. hhd., heavy, \$70; Staves, do. bbl. light, \$30 a \$35; Staves, do. bbl. culls, \$20; Mahogany—St. Domingo, fine crotches, per foot, 35c. a 45c.; St. Domingo, ordinary do., 20c. a 25c.; Honduras, fine, 12½c. a 15c.; Mexican, 10c. a 15c.

NAVALS.—Cut, ¾c. a 3¾c. per lb.; American clinch, 5c. a 5½c.; American horse-shoe, 14½c.

OILS.—Olive, Marseilles, baskets and boxes, \$3.45 a \$3.50; Olive, in casks, per gallon, \$1.12 a \$1.25; Palm, per pound, 9c. a 9½c.; Linseed, city made, 57c. a 58c. per gallon; linseed, English, 57c. a 58c.; whale, fair to prime, 48c. a 52c.; whale, bleached 50c. a 60c.; sperm crude, \$1.40 a \$1.43; sperm, unbleached winter, \$1.47; lard oil No. 1, winter, 90c. a \$1; red oil, city distilled, 57c.; Wadsworth's refined rosin, 25c. a 35c.; boiled oil for painting, 25c. a 35c.; tanner's improved and extra, 30c. a 40c.; camphene, 45c. a 47c.; fluid, 50c.

PAINTS.—Litharge, American, 7c. per lb.; lead, red, American, 7c.; lead, white, American, pure, in oil, 8c.; lead, white, American, pure, dry, 7½c.; zinc, white, American, dry, No. 1, 5c.; zinc, white, French, dry, 7½c.; zinc, white, French, in oil, 9½c.; ochre, ground in oil, 4c. a 6c.; Spanish brown, ground in oil, 4c.; Paris white, American, 7c. a 9c. per 100 lbs.; vermilion, Chinese, \$1.12½ a \$1.22; Venetian red, N. C., \$1.75 a \$2.25 per cwt.; chalk, \$4 per tun.

PLASTER-OF-PARIS.—Blue Nova Scotia, \$2.75 per tun; white, \$3.50; calcined, \$1.20 per bbl.

RESIN.—Turpentine, soft, N. C., per 280 lbs., \$3.50 a \$3.56; Wilmington, &c., \$3.50 a \$3.56; common, per 310 lbs., \$1.62 a \$1.65; strained and No. 2, \$1.65 a \$2.00; No. 1, per 280 lbs. \$2 a \$2.37; white, \$3 a \$4; pale, \$4.50 a \$5.50.

SALT-PETER.—Refined, 12c. per lb.

SOAP.—Brown, per pound, 5c. a 8c.; Castile, 9c. a 9½c.; Olive, 7c. a 7½c.

SPELTER plates, 5c. a 5½c. per lb.

STEEL.—English cast, 14c. a 16c. per lb.; German, 7c. a 10c.; American spring, 5c. a 5½c.; American blister, 4½c. a 5½c.

SUGAR.—New Orleans, 7c. a 8½c. per lb.; Porto Rico, 7c. a 8½c.; Havana, brown and yellow, 7c. a 8½c.; Havana, white, 9c. a 9½c.; Brazil, white, 8c. a 8½c.; Brazil, brown, 7½c. a 7¾c.; Stuart's granulated, 10c.

SUMAC.—Sicily, \$70 a \$80 per tun.

TALLOW.—American prime, 10½c. a 10¾c. per lb.

TIN.—Banca, 32c.; Straits, 30c.; plates, \$6.50 a \$9.25½, per box.

WOOL.—American, Saxony fleece, per lb., 55c. a 60c.; American full blood merino, 48c. a 52c.; extra, pulled, 45c. a 50c.; superfine, pulled, 30c. a 48c.; California, fine, unwashed, 24c. a 32c.; California, common, unwashed, 10c. a 18c.; Mexican, unwashed, 11c. a 14c.

ZINC.—Sheets, 7½c. a 7¾c. per lb.

The foregoing rates indicate the state of the New York markets up to February 16th.

Our markets have been very quiet during the past and present month, and there was scarcely any change in prices during the week just passed. The Spring business is growing apace from day to day without any fluctuation in prices. The western States do not seem to have recovered from their depressed commercial condition yet, and, as a consequence, their merchants are cautious in buying. The southern trade is becoming quite brisk. Manufacturers have little or no stock of made goods on hand; large buyers, on this account, are compelled to order what they want ahead. Winter silks have declined in price since the first of January.

The imports entered at the Custom House of New York, during the week ending Feb. 11th, amounted in value to \$1,639,618; and of this the two highest amounts were for tea and coffee, \$515,803 for the former and \$125,458 for the latter.

Our export trade of American manufactures is much greater than many persons suppose. Since January 1st, it has amounted to 11,492 packages, valued at \$695,307.

An immense sale of American fleece and pulled wool took place on the 16th inst., by Messrs. Dike & Brothers, of this city. The catalogue comprised half a million of pounds, of all shades and qualities. The sale was well attended, and prices ruled at about the regular quotations. The prices were considered good, and this is a favorable sign in regard to the prosperity of our woolen manufactures. Ohio, Pennsylvania and New York fleeces brought the highest prices—54 cents.