

Improved Polishing Machine.

There are numbers of small articles in use every day which have a high degree of finish imparted to them, and yet are afforded at a very low price. This could only be done by the use of improved machines that work speedily and accurately. Lead-pencils, pen-holders, wooden crochet needles, and even small metal rods, can be polished handsomely and with great celerity, by the aid of the machine herewith illustrated. The apparatus itself is very simple in its character and construction; the principal parts being an endless belt, A, covered with emery running over the pulleys, B and B'. These pulleys are driven by the larger spur wheel, C, through the intervention of the pinion, D, and a shaft running through it and the pulley, B'; both of these pulleys run through the bracket, E. The table, F, carries two feed rolls, G, made of india-rubber; these rolls are made from a belt on the shaft running through pulley, B', and are connected with each other by the small gears, H; the rolls are placed alternately on either side of the polishing belt. There are two smaller spring rolls, I, which confine the work to the belt; these rolls run freely on their bearings and have enlarged ends, so that the work cannot run off or twist while being polished. The work to be polished, supposed in this case to be a pencil, is placed in the trough, J, and the handle on the wheel, C, turned. This operation gives motion to the emery belt, A, and drives the rolls so that the pencil is moved onward diagonally in the direction of the arrows. This imparts a smooth and beautiful finish to the work and much improves its appearance. The machine is shown temporarily affixed to a table or bench, and it can be driven by steam or any other power.

Patented on July 21, 1863, by Warren Wadleigh, of Sanbornton Bridge, N. H.; for further information address D. H. Priest, New England Handle Company, 46 Congress street, Boston, Mass. State, county or town rights for sale.

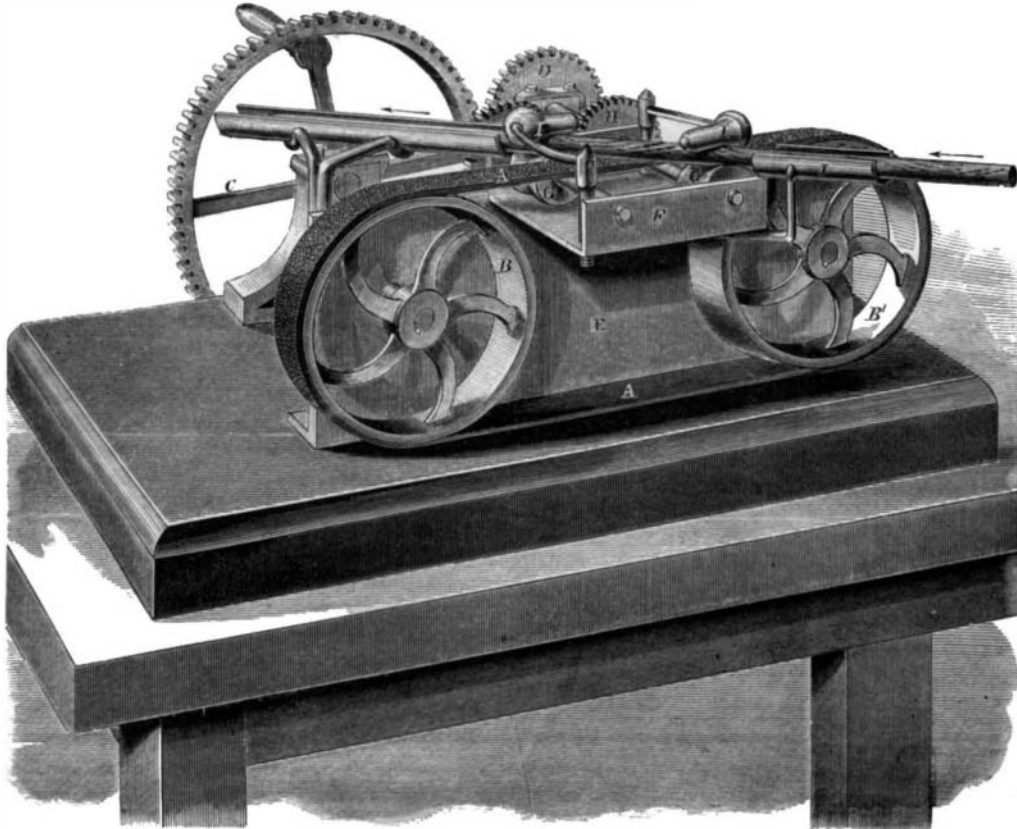
SUGAR IN ENGLAND.

Sugar sells at about double the price in New York that prevailed two years ago, and it is scarcely possible to account for this great rise by the law of demand and supply. There has not been a scarcity of the article, but an increase in the quantity. In London the quantity in store on the 20th October was 109,000 tons, against 87,000 tons at the same period last year. In 1862, the total import of sugar into England was 494,465 tons, and in the first eight months of the present year 433,867 tons—only 60,598 tons less. It is expected that the total import this year will be 539,800 tons.

France has imported 36,740 tons less during the first eight months of this year than in the same period of 1862, which leaves a greater supply for other countries to the same extent; and yet prices have been advanced in England as well as in America. The stock of sugar in all Great Britain on October 1, amounted to 230,000 tons, against 181,000 tons last year, and 162,000 tons in 1861.

Yellow Havana was selling at 40 shillings per 112 pounds; Mauritius at 30 shillings; Jamaica, 35 shillings. The duties upon these qualities of sugar range from 12 shillings and 8 pence to 18 shillings and 4 pence per 112 pounds. The price of refined white sugar in London, October 10, was 45 shillings per 112 pounds, for fine yellow, 38 shillings; or about 9 cents per pound for the white and 8 cents for the yellow.

SPECIAL NOTICE.—Leonard Smith, of Troy, N. Y., having petitioned for the extension for seven years of a patent for smut machines, granted him on Feb. 12, 1850, and which expires on Feb. 21, 1864, it is ordered that the said petition be heard on Jan. 25, 1864 at the Patent Office at Washington. All persons opposed to such extension are required to appear and show cause why it should not be granted. The testi-

**WADLEIGH'S POLISHING MACHINE.**

mony in the case will be closed on Jan. 11; depositions and other papers relied on as testimony must be filed on or before that day.

COLBURN'S LAMP FILLER.

The rapidity with which kerosene oil has come into



general use for illuminating purposes has been so great that the inventive genius of the age has been taxed to its utmost capacity to simplify the class of

lamps adapted to its use. It is believed that more patents have been granted for improvements in lamps within the last three years than ever before in the history of this article. Among the latest is one to facilitate the filling of lamps without inconvenience or delay. All who have used kerosene oil know that it is not a pleasant task to fill a lamp in the ordinary way. To remove the chimney, unscrew and take off the burner and hold it so as to pour in the oil without soiling the hands or garments, requires a great deal of care. In spite of all possible caution it often happens that the lamps are filled too full, and then everything in the vicinity is soiled by the overflow. Clumsy people often make a great deal of trouble for themselves by not inserting the burner in the lamp properly, so that the screw will take.

The lamp filler herewith illustrated is designed to obviate the difficulties mentioned, and does so perfectly. It is a small, neat attachment, placed between the burner and the collar of the lamp; through it the oil chamber can be filled with perfect ease. The filler (see small figure) is made in sizes to fit any lamp, by simply screwing it into the collar thereof, and then screwing it into the burner. It is simple and

can be furnished for those wishing to apply it to lamps now in use at a trifling cost. The position of the chimney and attachment during the operation of filling is shown in the large figure.

This invention, by G. F. J. Colburn, of Newark, N. J., was patented through the Scientific American Patent Agency, on July 14, 1863, and issued to Lemuel Beers, Newtown, Conn., sole assignee. Further information can be had by addressing the manufacturers, Messrs. Beers, Judson & Beers, at No. 43 John street, New York City.

Strike of the Machinists in this City.

The machinists of this city are now on strike for an advance of 25 per cent to their wages. It is asserted that the amount of pay they receive has been over-estimated, and that instead of \$3 they receive but \$2 per day. Several of the principal firms have complied with the demands of the men, but the larger ones—the Novelty, Morgan, Allaire, and other shops—refuse to pay the advance, alleging that their contracts were taken at prices which do not admit of raising the average rate of pay. The men are quite firm in their demands, but have not as yet any recognized organization.

THE STARVATION OF UNION PRISONERS BY THE REBELS.

—It is becoming a serious question as to what shall be done to relieve the sufferings to which the necessities and the brutalities of the Rebels have doomed the 13,000 Union prisoners in Richmond, 1,000 of whom are officers. If they cannot be released, and the rebels still refuse to exchange, it is a question whether they ought not to be forced to feed themselves, or as the least that can be demanded under the laws of war, to allow our Government to feed them.

CONSUMPTION OF COAL BY GOVERNMENT VESSELS.—The quantity of coal required for Government vessels is really incredible. There are three hundred and fifty steamers afloat in the service burning coal. The *Ironsides* alone burns two tons per hour, forty-eight tons per day, or sixteen thousand tons per annum. One million five hundred thousand tons is the estimated quantity required for this part of the service.—*Washington Union*.