

IMPROVED BLIND-WIRING MACHINE.

It takes but a short experience in watching the progress of inventions to teach a person not to pronounce anything perfect. It is not long since we described a blind-wiring machine which seemed to us as simple as one could be made, but we have one here certainly more simple still.

In the engraving it is shown in the act of inserting the staples into the slats to connect the rod to the blind. For this purpose the machine is placed astride of the rod with the bent toes catching under the stationary metal rod, B; and the handle is forced down, carrying one of the little wire staples, as shown in Fig. 2, with one leg through the staple in the rod C, and pressing it into the edge of the slat. As the lever, G, is depressed, the bent arm at its fulcrum end draws back the slide, I, and allows one of the staples to slip from the inclined needle, J, under the end of the descending press, H. The staples are placed upon the needle by dipping the latter into a box full of the staples and gathering them upon it. As it is necessary that the middle of the blind should always preserve the same position in relation to the metal rod, B, the clamps, M and N, which hold the blind are carried back and forth by a positive and equal movement by being connected with right and left screws on

the rods, o o, which rods are furnished with cranks for turning them.

For inserting the staples into the rod, C, this is placed in the grooved rest, P, and the machine is placed astride of it at right angles to the position shown in the cut, with the hooked toes catching under one of the short rods or stops, r r r, and after one staple is inserted, the machine is moved to the next stop and the operation repeated, the distance apart of the staples thus corresponding with the distance of the stops from each other. This distance is adjusted by boring holes at the proper distance apart in the bar, S; the stops, r r, being movable, and a bar, S, being required for each size of blind. The screw, v, is for adjusting the depth to which the wire is inserted, and the spring, L, raises the lever, G, to its place after the work is done. The machine is very light, weighing certainly less than a pound, and the inventor says that all who have worked with it have been much pleased with its operation.

The patent for this invention was issued Oct. 11, 1859, and persons desiring further information in relation to it will please address the inventor, Biram C. Davis, at Binghamton, N. Y.

REMOVAL OF CARBON FROM RETORTS.

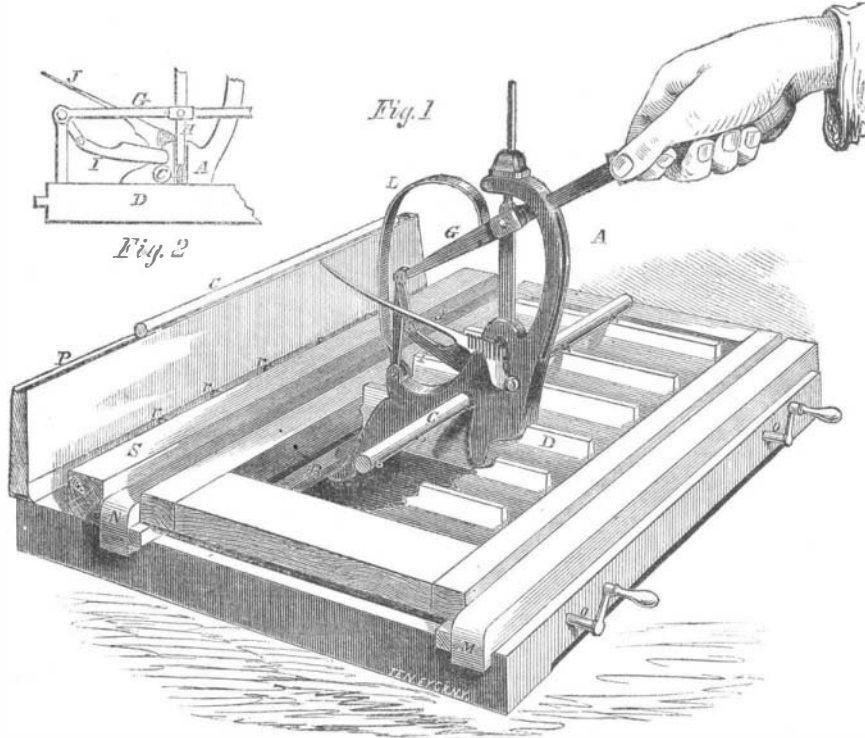
A correspondent of the *Journal of Gas-lighting* (London), writing from Copenhagen, states as follows:—

"Much inconvenience at times arises in gas-works from the accumulation of carbon in clay retorts, and the stopping-up of the stand-pipes. I myself suffered from this cause last winter, and was induced to devise a plan which I believe has not been adopted in England, for cleaning out the retorts and pipes; and as it has been completely successful, a description of the method will, I think, be of some interest to your readers. My retorts are of clay, 17 feet 6 inches long, and have a mouthpiece at each end. As soon as the deposit begins to be

troublesome, I put into one of the mouthpieces of the retort a wrought-iron pan (shaped to the form of the retort), 18 inches long and 6 inches deep, filled with water. Both retort-lids are then put loosely on, and the cover of the stand-pipe at the end of the retort opposite to that in which the pan is placed is taken off. The open stand-pipe acts as a chimney, and draws the steam which is generated along the retort. The steam is decomposed by contact with the graphite, and in about 24 hours the lat-

prevented from sliding along the bar. The lever, F, is made somewhat larger than the bar, A, so that it may be readily grasped by the hand, and it will be seen that it adds its own strength to that of the bar; the whole arrangement forming a very strong and convenient wrench.

The patent for this invention was issued through the Scientific American Patent Agency, Dec. 20, 1859, and persons desiring any further information in relation to it will please address the inventor, A. J. Bell, at Ashland, Ky.



DAVIS' BLIND-WIRING MACHINE.

ter can be loosened and removed with facility. The tar, &c., in the stand-pipe will also be completely burned out."

IMPROVED WRENCH.

The wrench which we here illustrate seems to us the most readily adjustable of any that we have ever examined. The movable jaw slides loosely on the bar and is wedged tight and held firmly in place by a very simple

The case was on for ten days, and at one time the jury came in and desired to be discharged, because they could not agree; they were sent back by Judge Leavitt with further instructions, and at last, after being out all night, brought in a verdict of one cent damages.

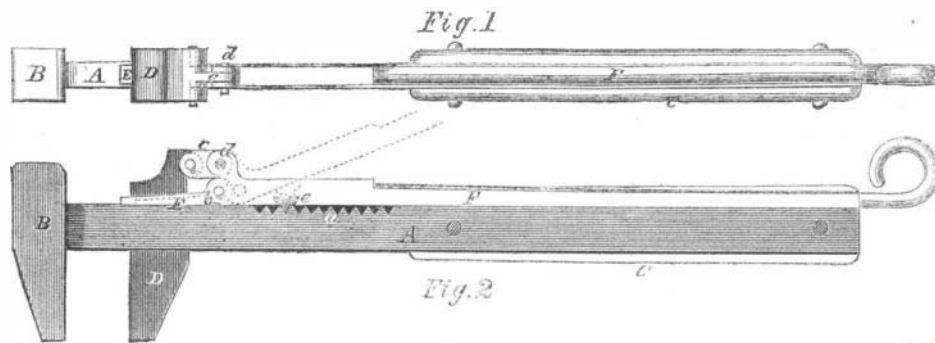
This suit has caused no small amount of excitement among the engineers and mechanics in Cincinnati; and so far as it has gone this case amounts to almost no trial at all. It has been complained that in this case the

rulings of the Court shut out important testimony on the part of the defense, after the plaintiff's main evidence was in, and that a very wide latitude was allowed to the one in comparison with the other. The valve used by the defendants is called the "Cope valve," and is held by a number of experts to be no part of Judson's invention. The principle of the patented Judson valve was stated by the Judge to consist of "an increase of opening through its whole

range of motion." The meaning of such an expression may be twisted two or three different ways. Another suit will soon come on, at which the same issues will be again tried, with the admission of more ample testimony. Until then any expression in relation to the merits of the case would be indiscreet, because unreliable.

TO INVENTORS AND PATENTEES.

Messrs. MUNN & Co., Editors and Proprietors of the SCIENTIFIC AMERICAN, respectfully give notice that, in addition to their own experience of nearly fifteen years, they have now associated with them Judge Mason, who for several years held the office of Commissioner of Patents. This arrangement renders their organization thorough and complete, and is a sure guaranty that all business connected with the examination of inventions, preparing specifications, drawings, caveats, assignments of patents, prosecuting rejected cases, interferences, reissues and extensions of patents, and opinions of the infringement and validity of patents will receive the most careful attention.



BELL'S PATENT WRENCH.

movement of a lever which will be understood by inspecting the cut.

The bar, A, having the permanent jaw, B, at its end, passes loosely through a rectangular slot in the movable jaw, D. This slot is made sufficiently large on the upper side to admit the wedge, E. This wedge is connected by a pivot, e, to the end of the movable lever, F, which is joined by the link, c, to the jaw, D. To adjust the jaw to the size of the nut or other body to be grasped, the lever, F, is turned upward as represented by the dotted lines, which movement draws the wedge, E, from its place and allows the jaw, D, to slide freely on the bar, A. When the jaw is slipped to the desired place, the lever, F, is turned downward against the bar, A, thus forcing the wedge, E, into the slot and holding the jaw, D, very firmly in its position. As the lever, F, is brought down against the bar, A, the projection, e, upon its lower side enters one of the notches in the serrated edge, a, of the bar, and the lever and jaw are thus