

MACHINE FOR WIRING BLIND RODS.

The annexed engravings illustrate a machine, such as we occasionally have the pleasure of describing, which shows that it was contrived by a man who was familiar with the various mechanical motions, and who had a faculty for combining them judiciously to produce the several effects which he desired. It is made for the purpose of inserting the little wire staples in the rods of window blinds.

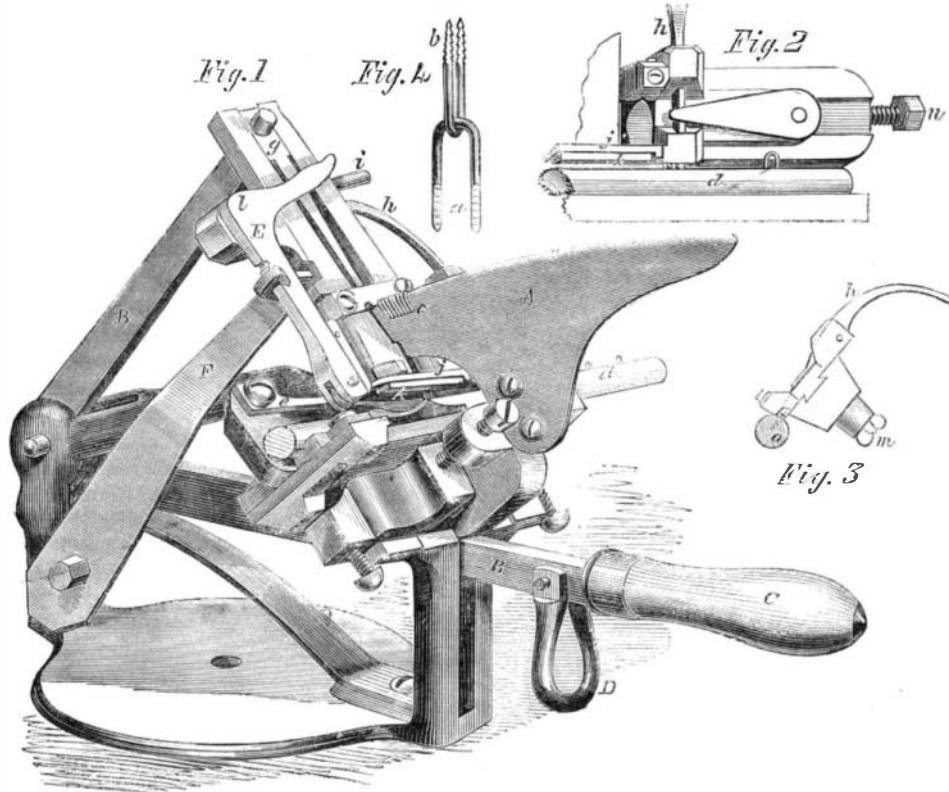
The inventor has two patents; one for the staples, and the other for the machine by which they are inserted. The staples are illustrated in Fig. 4, *a* representing the flat side, and *b* the edge. They are made of about No. 18 iron wire, and are pointed, flattened and serrated or grooved across the flat sides to make them hold firmly in the wood, into which they are inserted with their flat sides parallel with the grain.

Fig. 1 is a perspective view of the machine; and Figs. 2 and 3 are sections of different parts. The staples, *c*, are placed upon the slide, *A*, and the wooden rod, *d*, which is destined to receive them, is pushed into the groove, where it is firmly held by the spring, *e*. The V-shaped lever, *B*, which works upon the fulcrum, *f*, is pushed down by the handle, *C*, or by a strap in the link, *D*, connected with the treadle, carrying down the slide, *g*, along its oiled ways. The staples, *c*, slide by their own gravity down the upper inclined edge of the plate, *A*, and the lower one drops off the end of this edge, and is held by a light spring pressing against it from the back of the machine through a narrow slit in the ways. The slide, *g*, has a shoulder upon its backside which presses away, as it comes down, the light spring just spoken of, allowing the wire to fall fair into the ways below the square end of the slide, which, as it continues its course, carries down the wire and presses it into the rod.

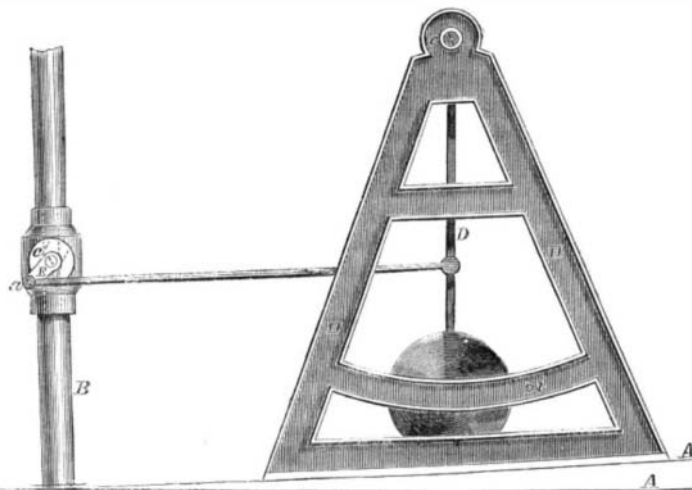
During the operation above described, the rod is held precisely in its place longitudinally by the next preceding staple resting against the side of the lower end of the lever, *h* (Fig. 3). It will consequently be necessary to tilt the lower end of lever, *h*, away from the staple before the rod can be fed along for another wire. For this purpose the pin, *i*, is fastened firmly to the lever, *B*, at such a point that it may strike the upper end of lever, *h*, after the wire begins to enter the rod. To feed the rod along for another staple, the flat rod, *j*, which slides along the guide, *k*, is jointed to the lower end of the elbow, *E*, which works upon the fulcrum, *l*. As the lever, *B*, descends, it strikes the horizontal arm of the elbow, *E*, and thus draws along the flat rod, *j*, out of the way of the descending staple. After the staple is inserted, a lip upon the lower side of the rod, *j*, at its end, is brought against the staple; and, as the rising of the lever, *B*, releases the elbow, *E*, the stiff spring, *F*, restores the elbow to its place, thus pushing along the rod, *d*, until it is stopped by the staple coming against the side of the lower end of the lever, *h*. It will be seen that this feeding-arrangement places the staples at the same distance apart with great precision. This distance is varied for different sized blinds by sliding along the block in which the lever, *h*, is fastened. This block is held in place by the set screw, *m*; and to adjust it with greater accuracy, the regulating-screw, *n*, is put into the

end of the guide, and, being turned in to the proper depth, the set screw, *m*, is brought against its end.

The patent for this machine was granted Sept. 1, 1857, and the patent for the wire staples, March 30, 1858. The inventor is Byron Boardman, of Norwich, Conn. Persons desiring information regarding the purchase of rights may address C. B. Rogers & Co., of the above place. The machines are now on sale at the stores of all the dealers in the "Fay" machines for carpenters and builders.

BOARDMAN'S MACHINE FOR WIRING BLIND RODS**CATHCART'S MARINE GOVERNOR.**

In the SCIENTIFIC AMERICAN of Oct. 22d, we gave the substance of a paper on the subject of steam governors, read before the Institution of Engineers in London, by Peter Jensen of Sweden. Mr. Jensen in his paper confirms the opinion which we have repeatedly

**CATHCART'S MARINE GOVERNOR.**

expressed, in regard to the great importance of furnishing the marine engine with a practicable self-acting governor. When a side-wheel steamship is rolling in a heavy sea, at one moment upon an even keel, with both wheels resisting alike, and at the next with one wheel in the air, and the other submerged almost to its center, if the whole tremendous power of the great engine is allowed to exert its full force upon the shaft, no conceivable strength of shaft and frame-work can resist the varying strain. Accordingly, it is customary in such

cases to station a man at the valve, and have the steam

reduced as the vessel rolls one side down, and let on again as she returns to an even keel. Several efforts

have been made to replace the man at the valve, by some device connected with the slip or with the machinery which should be less expensive than a man, and more absolutely certain in its operations. The devices which we have seen hitherto have been more or less clumsy, complicated, or otherwise objectionable, but the one which we here illustrate is certainly extremely simple, and it appears as if it must work; this however,

will be proved by proper trial. It consists simply of a pendulum attached to a valve in the pipe, which leads from the boiler to the cylinder. In a side-wheel steamer, the pendulum is placed to swing athwart ships. In the engraving, *A*, represents the deck of the vessel; *D*, the pendulum; *H H*, the frame which supports it; *B*, the pipe leading from the boiler to the cylinder; *C*, a valve in said pipe; *E*, a crank on the axle of the valve; *a*, a pin by which the crank is attached to the rod which forms the connection between the valve and the pendulum. The cut represents the position of the apparatus when the deck is inclined by the rolling of the vessel, the pendulum being swung to one side of the frame, and the valve partly closed, the steam consequently being nearly cut off, and the strain on the shaft, while one wheel is nearly out of water being correspondingly diminished. When the vessel resumes its position

on an even keel, the pendulum returns to the middle of the frame, the valve is fully opened and the whole power of the engine is again thrown upon the shaft. By varying the length of the pendulum rod, or by attaching the connection rod at other points on the pendulum rod, the amount of opening and closing of the valve may be adjusted at pleasure.

In propellers the pendulum is so hung that it may swing fore and aft the vessel, as the propeller is thrown out of water by the pitch of the ship, instead of the roll.

This most simple of marine governors was invented by James L. Cathcart, of Georgetown, D. C., who has secured patents in England and France, as well as in this country. His American patent is dated April 26, 1859. Persons desiring further information in relation to this invention may address Edward Boyce as above.

DEATH OF AN INVENTOR.

On the 5th of last month a remarkable mechanic and inventor died in this city, and since that period we have learned some details of his unobtrusive but interesting life. James Stewart, well known in this city for the beautiful and neat small lathes which he manufactured for jewellers and others, in his shop on the corner of Elm and Canal streets, was a native of Scotland, and came to

Boston in 1828, when 23 years of age. He was a thorough-bred machinist and soon became known for his skill and ingenuity. He was the inventor of the machine for making hooks and eyes, which had previously been made by hand. It was pirated from him by an unscrupulous manufacturer and lawyer, and while it has enriched others, he never obtained the least benefit from it. He removed from Boston in 1835, and lived in this city till the day of his death. He was the inventor of the seraphine which is now in common use, and was an adept in music and musical instruments.