

F. J. RABBETH.
Surface-Gage.

No. 228,391.

Patented June 1, 1880.

Fig. 1.

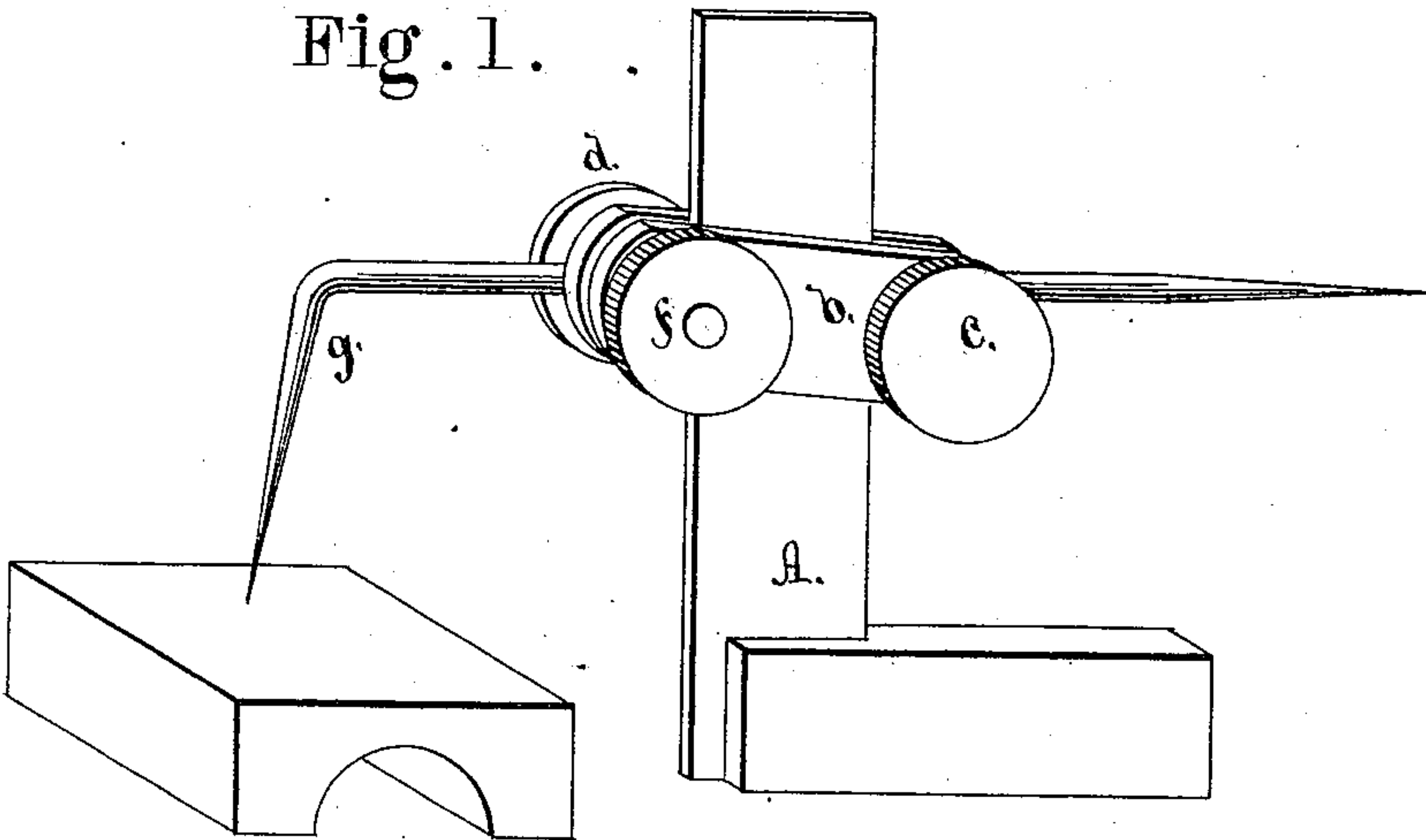


Fig. 2.

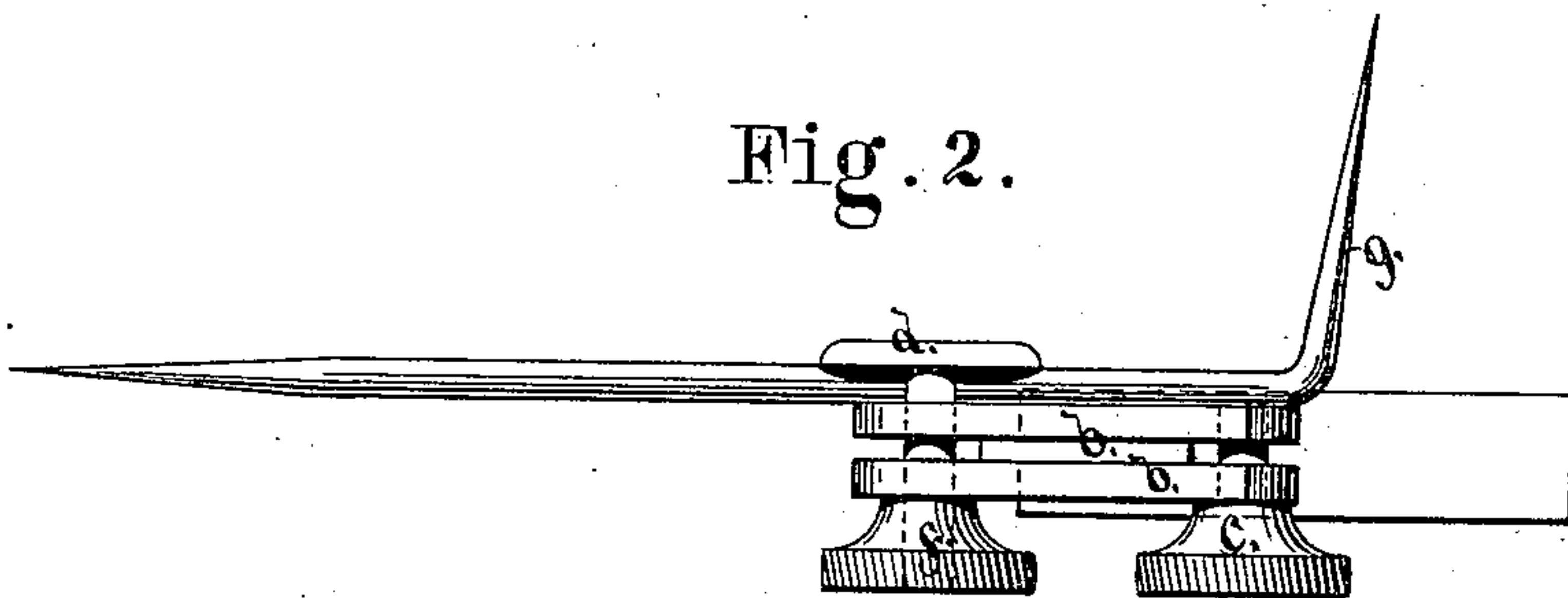


Fig. 3.

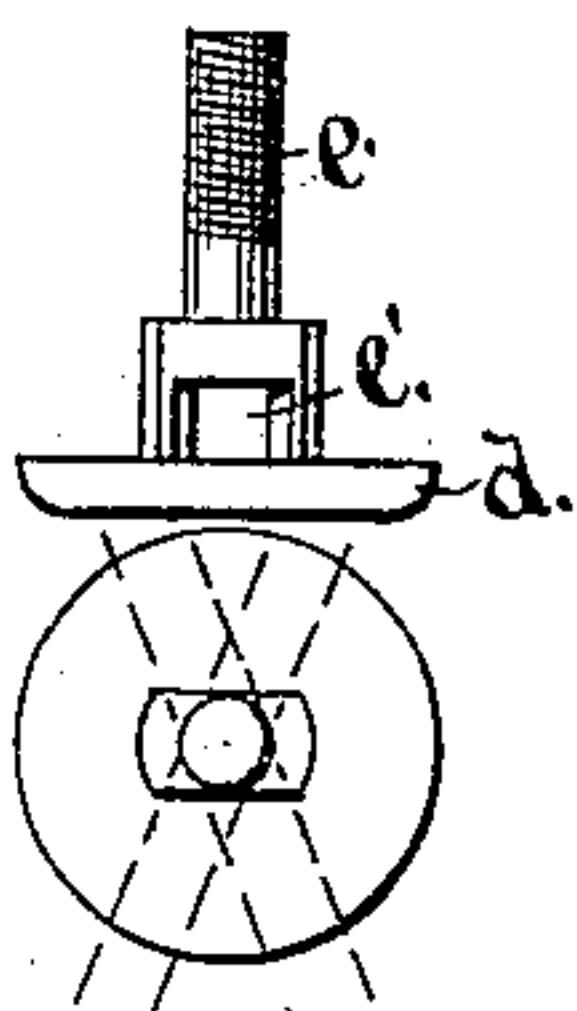


Fig. 4.

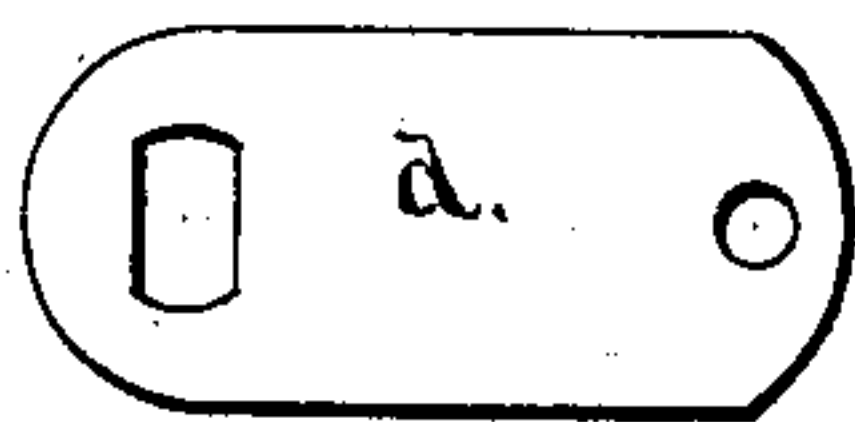
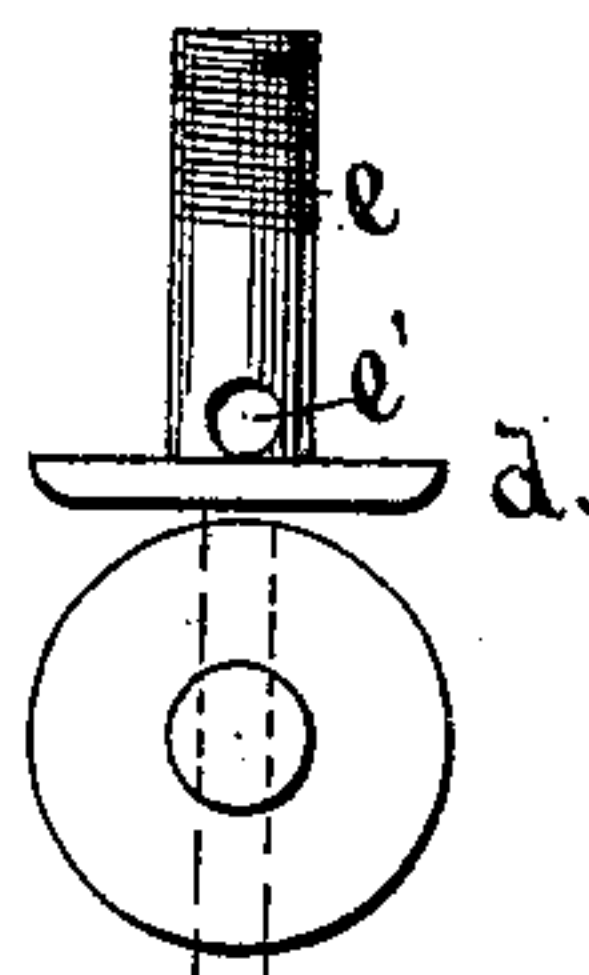


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANCIS J. RABBETH, OF LINCOLN, RHODE ISLAND.

SURFACE-GAGE.

SPECIFICATION forming part of Letters Patent No. 228,391, dated June 1, 1880.

Application filed December 31, 1879.

To all whom it may concern:

Be it known that I, FRANCIS J. RABBETH, of Lincoln, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Surfacing-Gages; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a perspective view, showing a try-square to which a wire is clamped, one end of which is bent at, or nearly at, right angle, and both ends of which are pointed, and a rail or piece of metal, to the surface of which the curved end is adjusted. Fig. 2 is a top view of the clamp and the pointed wire secured to the try-square so as to be used for scratching a line against the side parallel with the plate or surface on which the try-square slides. Fig. 3 is a view of the bolt, in the shank of which the wire is secured. Fig. 4 is a view of one of the clamping-pieces, and Fig. 5 is a modification of Fig. 3.

This invention has reference to an improvement in the tool used by machinists and known as a "surfacing-gage," or a tool by means of which the surface of anything to be planed in a planer or milled in a milling-machine can be readily adjusted so that the planing or milling tool will remove the amount of metal desired.

Such tools have been heretofore costly of construction, large, and cumbersome, and therefore difficult to store away in a machinist's chest.

To reduce the cost and size of such an instrument, make it useful for a scratch-point to mark lines parallel with the bed of a planer or other surface, and adapt it to the ordinary try-square are the objects of this invention, which consists in the peculiar arrangement of clamps, by which a pointed wire can be readily secured to the ordinary try-square, and a cheap, simple, and useful tool produced.

In the drawings, A represents the ordinary try-square, made of iron or steel and used by machinists. *b b* are two clamp-pieces. *c* is a

thumb-screw, the screw end of which enters the nut in the opposite clamp-piece.

d is the head of the screw *e*. This screw passes through both of the clamp-pieces *b b*, and is secured by the thumb-nut *f*. The screw *e* is provided with a hole, *e'*, near the head *d*, into which the pointed wire *g* is inserted. This hole may be round, as shown in Fig. 5, or square, as shown in Fig. 3. If round, the pointed wire is inserted into the hole, and when it is adjusted the bolt is slightly turned by adjusting the pointed wire, and is then secured in the desired position by tightening the nut *f*; but when the shank of the bolt *e* is enlarged and a square hole is used, beveled from the center outward, then the pointed wire can be adjusted without turning the bolt. In either case the points of the wire can be readily adjusted and firmly held in the desired position. As the wire can be readily clamped to any try-square and readily detached, it can be easily stored in a machinist's chest. As the base of the try-square forms a long and firm bearing, work may be accurately surfaced, and parallel lines marked on the sides of work with great precision. The cost of the instrument is very small, as the try-square is now in the hands of all machinists, and can be used for all other purposes for which it has been heretofore used.

The gage may be used for all purposes for which other surface-gages can be used, either in adjusting or marking.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the wire *g*, of the clamp-pieces *b b*, screw *c*, and the screw *e*, provided with the hole *e'*.

2. The combination, with a try-square, of the clamps *b b*, screws *c* and *e*, and the wire *g*, constructed to adjust the wire and secure the same, as and for the purpose described.

FRANCIS J. RABBETH.

Witnesses:

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