

S. S. Gould,
Fountain Pen.

No 47,944.

Patented May 30 1865.



Fig. 4.



Fig. 1

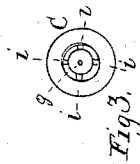


Fig. 3.

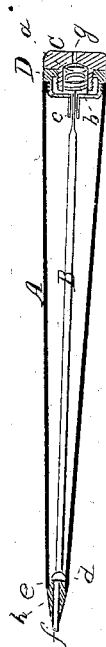


Fig. 2

WITNESSES.

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3

UNITED STATES PATENT OFFICE.

SYLVANUS S. GOULD, OF WORCESTER, MASSACHUSETTS.

CLOTH-DOTTER.

Specification forming part of Letters Patent No. **47,944**, dated May 30, 1865.

To all whom it may concern:

Be it known that I, SYLVANUS S. GOULD, of the city and county of Worcester, and State of Massachusetts, have invented certain new and useful Improvements in Cloth-Dotters; 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 a part of this specification, in which—

Figure 1 represents a perspective view of my improved cloth-dotter. Fig. 2 represents a longitudinal section of the same. Fig. 3 represents a bottom view of the screw-cap C, and Fig. 4 represents a longitudinal central section of the same.

In the drawings, A represents the body of the dotter, which is hollow, and contains the valve-rod B, which is supported at the top by the guide-tube *c*, attached to the bottom of the lower screw-cap, D, which is screwed into the top of the body A. Into the top of cap D is screwed the cap C, which has a hole, *g*, in the top and lateral openings or notches formed in the lower edge of its tube part, in which latter is inserted a spiral spring, *a*, which bears down the packing *b* upon the top of valve-rod B, all as fully indicated in the drawings. The valve-rod B is provided near its bottom with a valve projection, *d*, and packing *e*, which are forced down upon a valve-seat by the spiral spring at the top. The valve-rod extends down through the point *h*, which may be made separate from the body A, and fastened thereto in any suitable manner, or the parts A and *h* may be made in one piece, just as found most convenient. The lower end of rod B is provided with small grooves *f*, to aid in the free discharge of the dye.

In the manufacture of woolen goods, especially when manufactured from colored yarn, it is found impossible to so color or dye the yarn as not to have small spots or specks show after the shearing process has taken place, and these spots or specks have to be covered with a dye applied by hand. The old mode has been to apply the dye by means of a stick called a "dotter." The dye being contained in a vessel, the operator dips the stick into the dye and then applies the end covered with the dye to the spots or specks. This is a very inconvenient mode, and is attended with the further danger of dropping the dye upon parts not requiring it, besides rendering the hands and clothing of the operator liable to

stains from the exposed dye. By the use of my cloth-dotter all of the above objections are obviated.

The operation is as follows: The operator removes caps C D and fills the body A with dye. The caps are then replaced, and the dotter is ready for use. The cloth being spread out before the operator, he takes the dotter and applies the point thereof to the spots or specks, by which operation the projecting point of the valve-rod B is forced up and the necessary amount of dye escapes below valve *d*, and, passing down the grooves *f*, falls upon and covers the spot or speck on the cloth. As soon as the dotter is lifted from the cloth the spring *a* at the top forces the rod B down again, thereby shutting valve *d*, which prevents all further flow of the dye. The amount of dye discharged at any one time depends upon the length of time the point of the dotter is allowed to rest upon the cloth. When the point of the dotter is pressed down upon the cloth, the spring *a*, at the top, is compressed, and the packing *b* elevated by the rising of the upper end of rod B, thereby permitting the admission of air through the hole *g* and tube *c* to the interior of the body A, thus expediting the easy flow of the dye from the point of the dotter. When the dotter is not in use, it can be laid aside without danger of the dye running out, since spring *a* forces the packings *b* and *e* against their respective seats, whereby the openings both at the top and bottom of the dotter are closed. The lower edge of the tubular part of cap C is grooved out, as seen at *iii i*, to permit of the free ingress of air.

Having described my improved cloth-dotter, what I claim as of my invention, and desire to secure by Letters Patent, is—

1. The combination, with the body A, of the valve-rod B, caps C D, and valves *d b*, substantially as and for the purposes set forth.
2. The combination, with the caps C and D, of the spring *a* and packing *b*, substantially as set forth.
3. The combination, with the valve-rod B, of the point *h* and supporting-tube *c*, substantially as set forth.
4. Making the lower end of the valve-rod B with a series of grooves, *f*, for the purposes set forth.

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Witnesses:

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