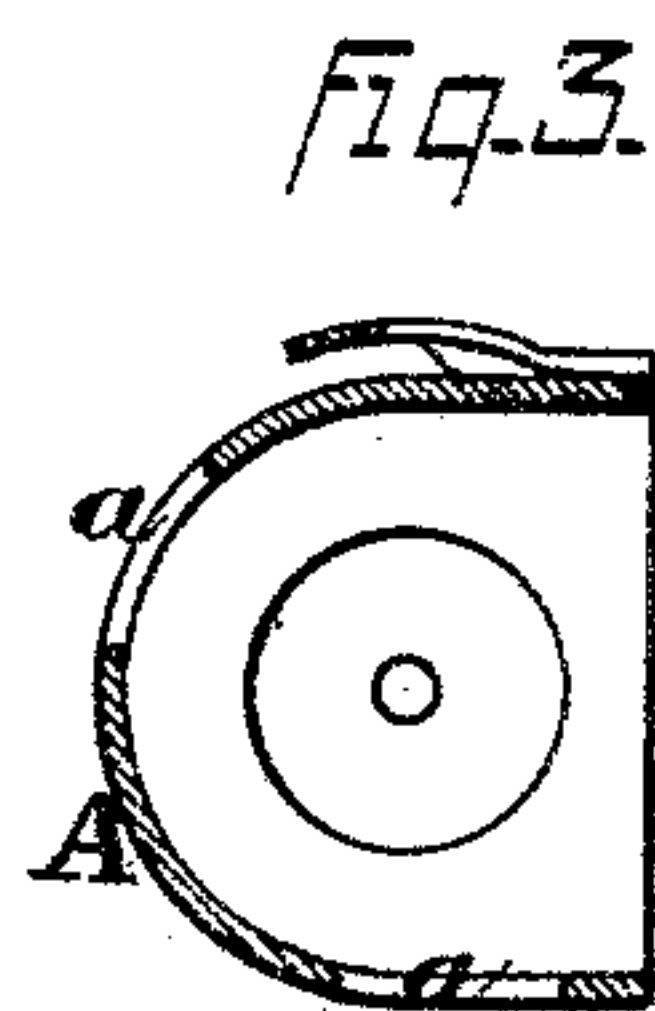
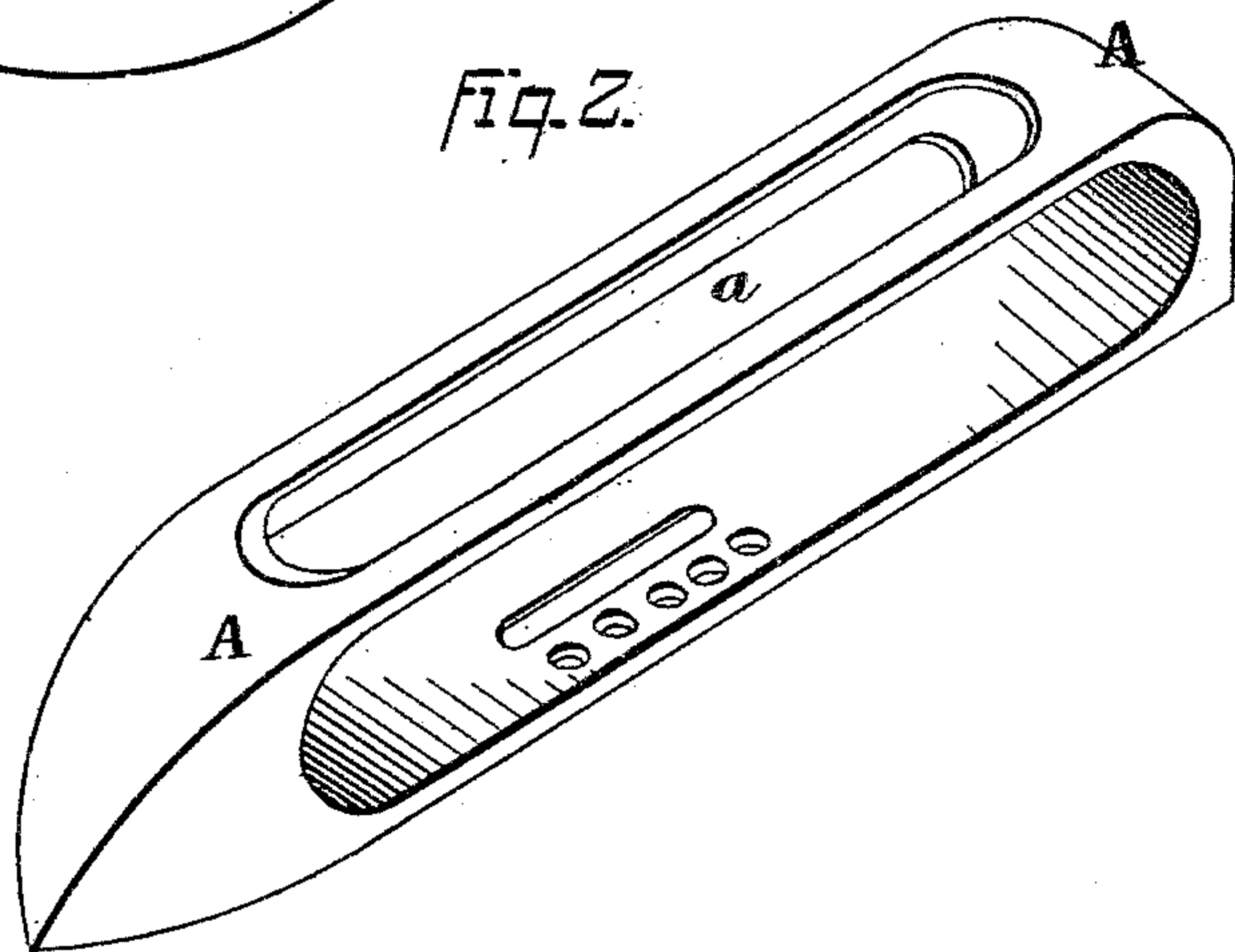
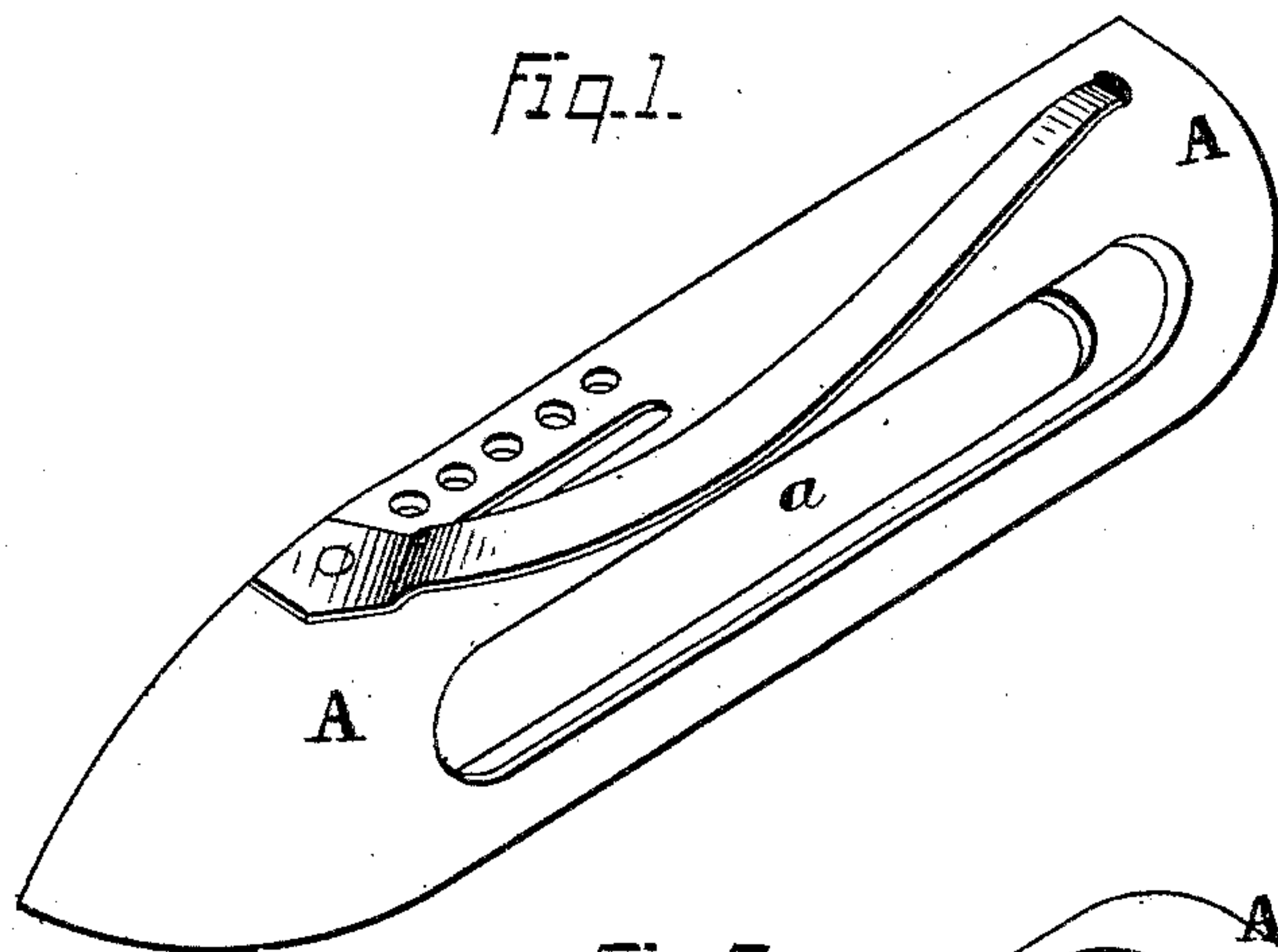


A. H. WAGNER.
SEWING-MACHINE SHUTTLE.

No. 177,042.

Patented May 2, 1876.



WITNESSES:

Jas. E. Hutchinson
John R. Young

INVENTOR.

A. H. Wagner, by
Prindle & Co., his Attys

UNITED STATES PATENT OFFICE.

AUSBERT H. WAGNER, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SEWING-MACHINE SHUTTLES.

Specification forming part of Letters Patent No. **177,042**, dated May 2, 1876; application filed February 1, 1875.

To all whom it may concern:

Be it known that I, AUSBERT H. WAGNER, of Chicago, in the county of Cook, and in the State of Illinois, have invented certain new and useful Improvements in Shuttles for Sewing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a perspective view of the upper side of my improved shuttle. Fig. 2 is a like view of the lower side of the same, and Fig. 3 is a central cross-section of said shuttle.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to reduce the weight and lessen the circumference of a shuttle, and enable dust or dirt to escape from its interior when in use; to which end it consists in a sewing-machine shuttle having its sides slotted longitudinally at two points, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents a shuttle of usual form and construction, except that within its rear and lower sides are formed openings *a* and *a*, which have, preferably, the form shown, and extend longitudinally between its ends.

As thus constructed, it will be seen that so much of the wall is removed by the openings

or slots *a* and *a* as to lessen the circumference of the shuttle, a thread passed around the same being drawn in a straight line from one to the other edge of each opening, instead of being compelled to follow the curve of the shuttle, as would be the case were not said openings provided, by which means less length of thread is required for forming a loop, and, consequently, less work is left for the take-up to perform.

The weight of the shuttle is materially reduced by the removal of so much of its walls, and thereby the noise and jar of the machine is correspondingly lessened, while, by means of the lower opening, dust and dirt, which would otherwise accumulate within and interfere with the operation of the bobbin, are permitted to fall harmlessly outward.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

The hereinbefore-described shuttle A, provided within its outer and lower sides with the longitudinal openings or slots *a* and *a*, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of December, 1874.

A. H. WAGNER.

Witnesses:

GEO. S. PRINDLE,
WILLIAM FITCH.