

(Model.)

T. J. RANDALL.

THILL COUPLING.

No. 250,755.

Patented Dec. 13, 1881.

Fig. 1.

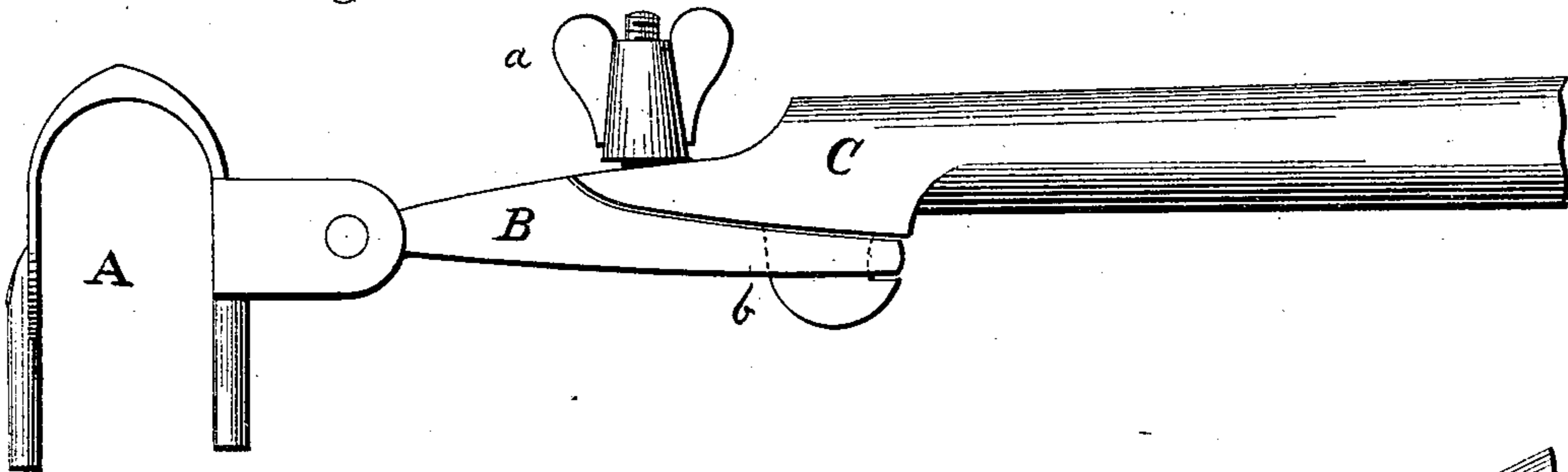


Fig. 2.

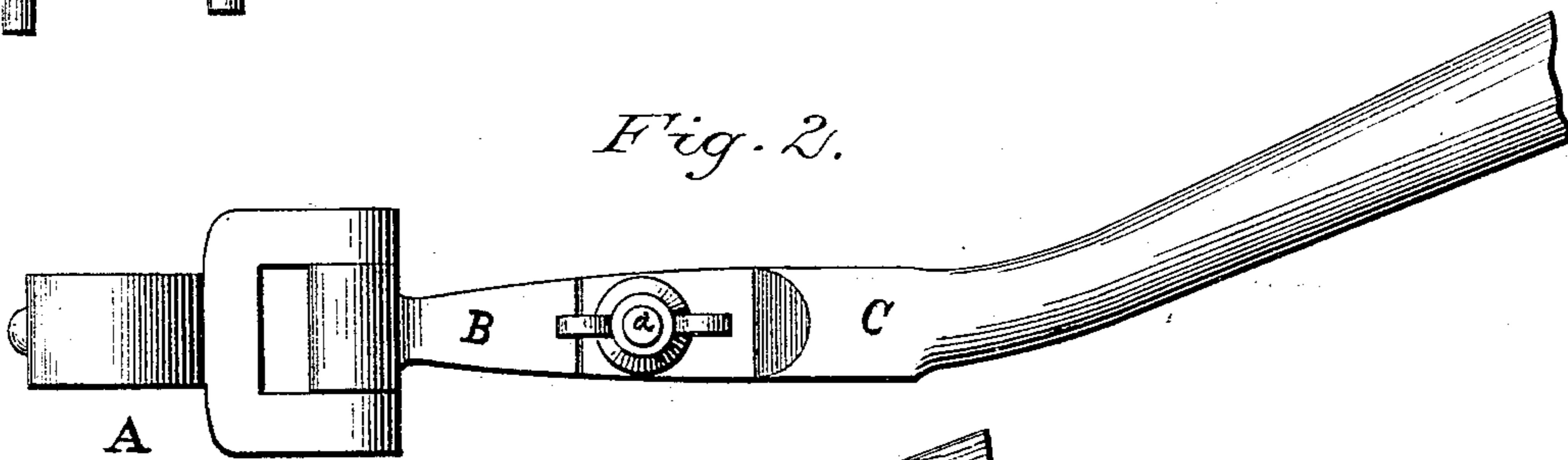


Fig. 3.

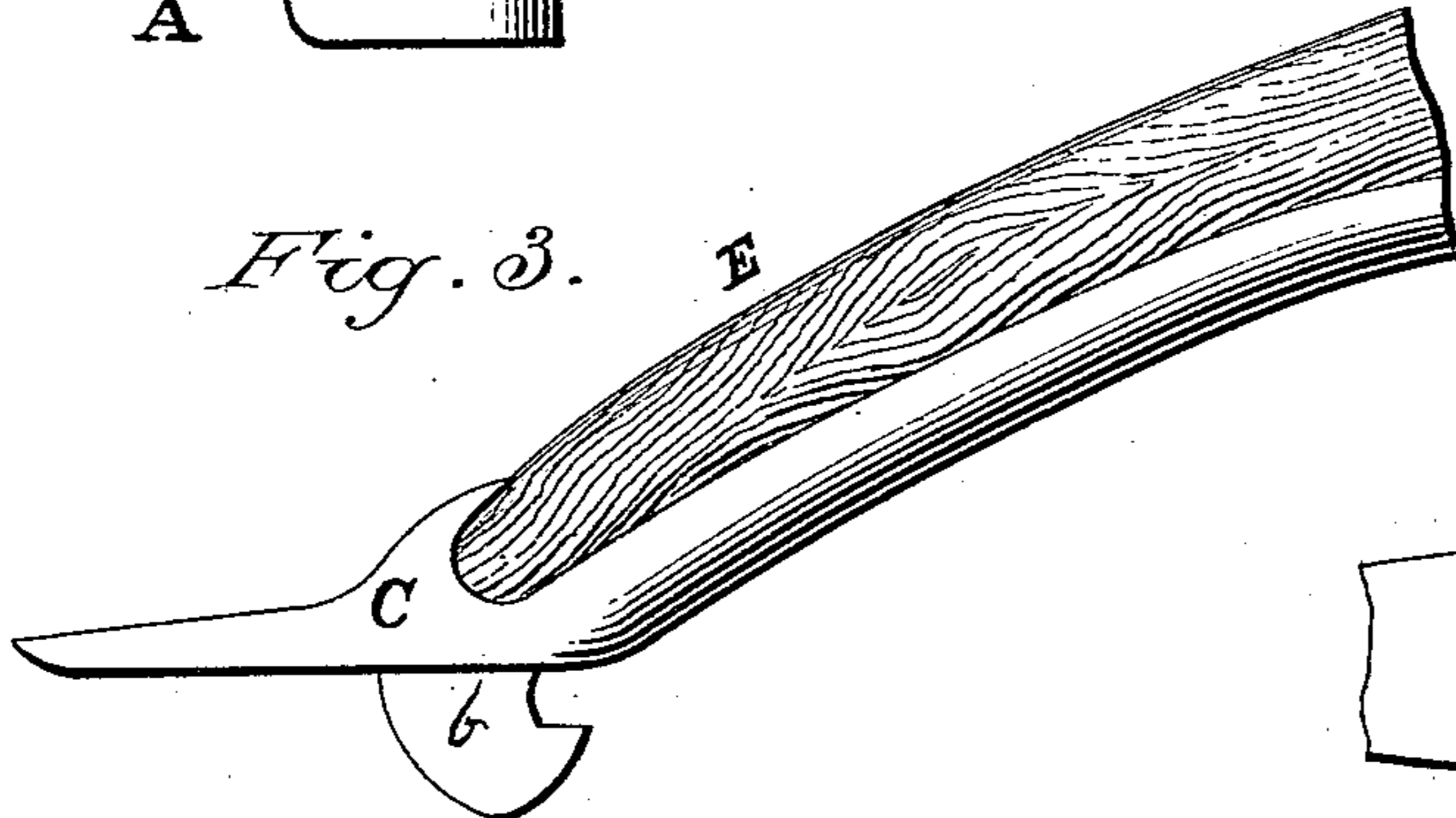


Fig. 4.

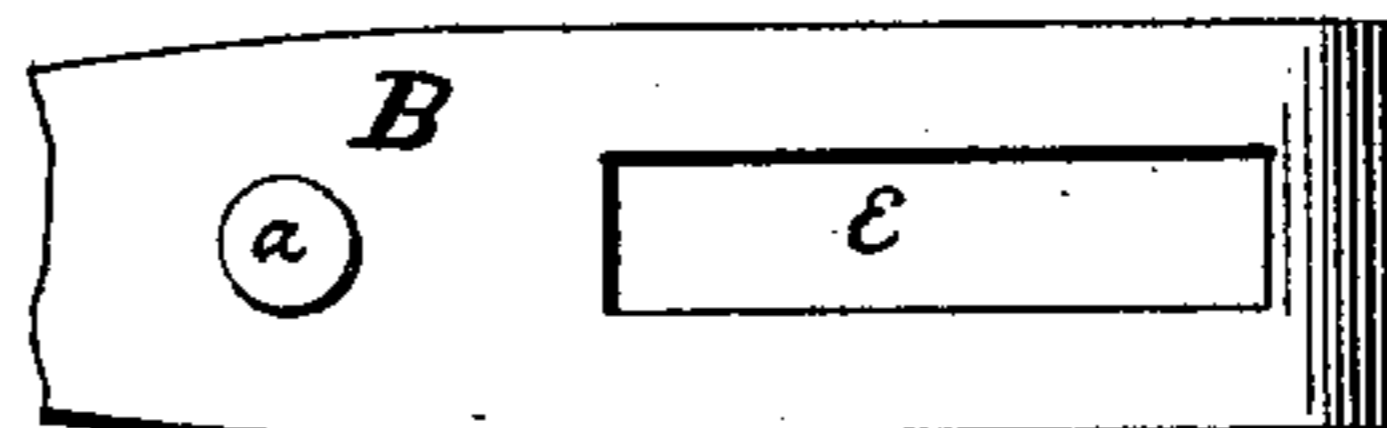
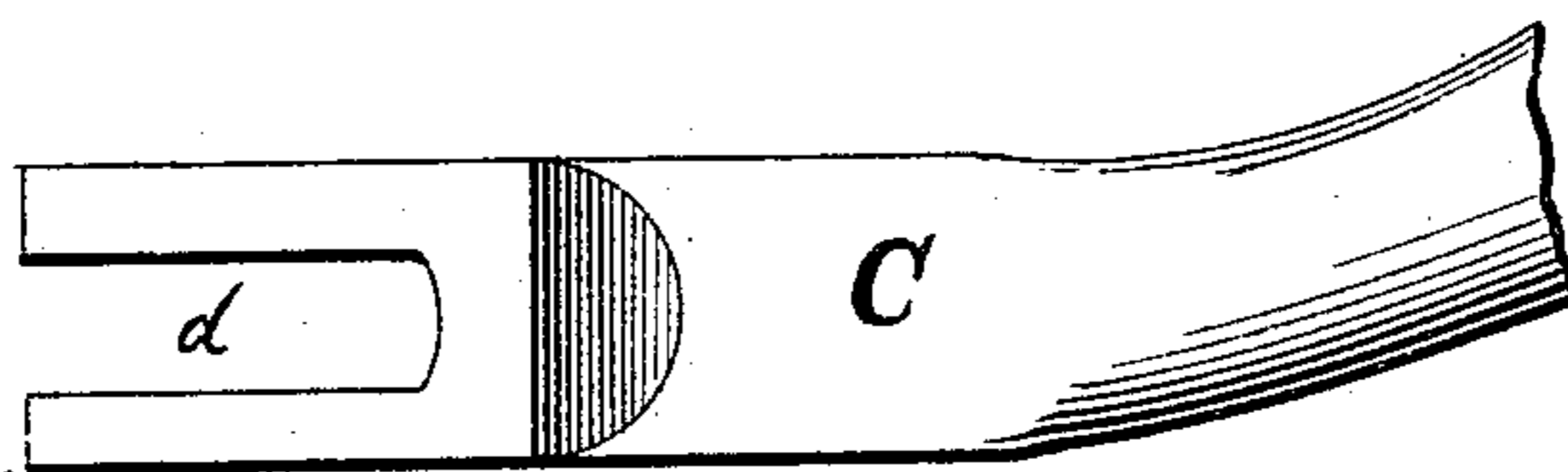


Fig. 5.



Witnesses:

James Jackson
G. B. Venable

Inventor:

Thomas J. Randall

UNITED STATES PATENT OFFICE.

THOMAS J. RANDALL, OF SING SING, ASSIGNOR OF ONE-HALF TO GEORGE
T. CLARK, OF MALONE, NEW YORK.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 250,755, dated December 13, 1881.

Application filed August 4, 1881. (Model.)

To all whom it may concern:

Be it known that I, THOMAS J. RANDALL, of Sing Sing, in the county of Westchester and State of New York, have invented a new and
5 useful Improvement in Attachments and Detachments of Thills and Poles from Carriages and Sleighs; and I do hereby declare that the following is a clear, full, and exact description thereof, reference being had to the accompany-
10 ing drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a short iron
15 shaft attached to any ordinary shackle used in the attachment of thills and poles to the axles of carriages, and extending therefrom, to which short shaft there is attached a heavy thumb-screw, and in the extremity of which is cut a slot,
20 to which short iron shaft the pole or thills of a carriage are to be attached by means of an iron attachment on the end of such pole or thills, constructed with a notch in the end of the same, and with a heavy iron hook on its bot-
25 tom surface. Both the short iron shaft or shackle-iron and the pole or thill iron are to be cut on a curve, the one fitting exactly to the other.

To attach the thill-iron to the shackle-iron the
30 notch in the end of the thill-iron is inserted under the thumb-screw attached to the shackle-iron, the heavy iron hook of the thill-iron falls into the slot in the extremity of the shackle-iron, and the thumb-screw being screwed down
35 the attachment of the thills to the carriage or sleigh is made perfectly firm, safe, and secure. To detach the thills the operation described above is reversed. The same arrangement ap-
40 plies to the attachment and detachment of poles to carriages and sleighs. In the case of sleighs the shackle-iron is attached to the draw-irons, and the shackle required for carriages is done away with.

I propose, further, to use an ordinary washer of rubber cloth under the thumb-screw, to pre- 45
vent the loosening of the thumb-screw when the carriage or sleigh is in use.

By means of my invention the thills and poles of carriages and sleighs may be attached and detached with rapidity and ease, and without 50
removing any of the bolts or rubbers commonly used with shackles and draw-irons of carriages and sleighs, but such shackles, bolts, and rubbers are left unremoved from the carriage or
55 sleigh.

In the drawings accompanying this appli- 55
cation, Figure 1 is a side elevation of shaft-coupling embodying my invention. Fig. 2 is a plan thereof. Figs. 3, 4, and 5 are detail
60 views of the several parts.

A represents an axle-clip, having ears, to which stub-iron B is jointed, all as in the usual manner of making shaft or thill couplings. To the stub-iron B is detachably connected the shaft-pole or thill-iron C, which is bolted to 65
the carriage pole or shafts in the usual way. The iron C is provided with a hook-projection, *b*, which fits into a slot, *e*, in iron B, and the iron B is provided with a set screw, *a*, which fits in the slot *d* in the end of the iron C. 70

When it is desired to remove the pole or shafts from the vehicle the set-screws *a* are loosened, and the pole can be readily detached and shafts put on, or vice versa, as the case may be. 75

What I claim is—

The stub-iron B, provided with set-screw *a* and slot *e*, in combination with the shaft or pole iron C, provided with the hook *b* and slot *d*, substantially as described.

THOMAS J. RANDALL.

Witnesses:

JAMES JACKSON,
H. C. WESTLAKE.