

No. 81,270.

PATENTED AUG. 18, 1868.

A. GOOD, JR. & S. STROUSE,
CONNECTION FOR WOODEN RODS.

Fig. 1.

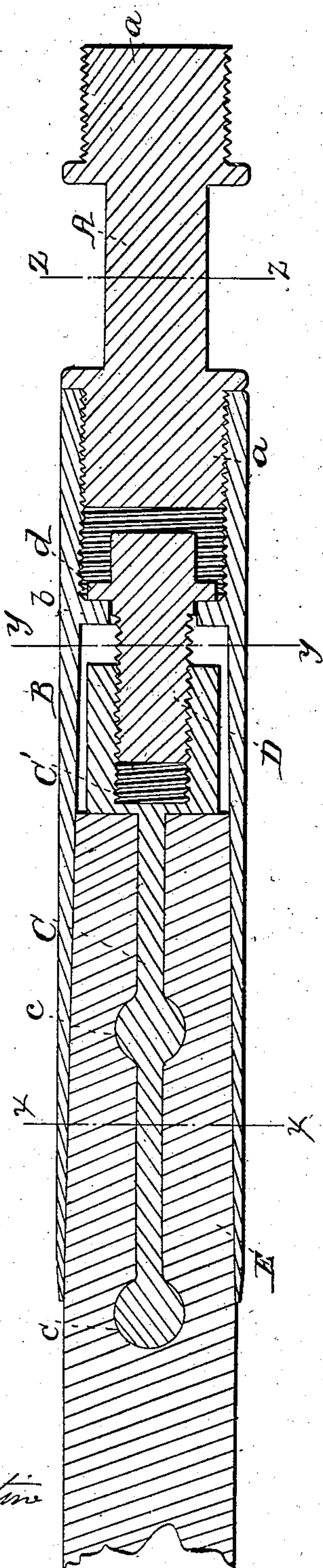


Fig. 4.

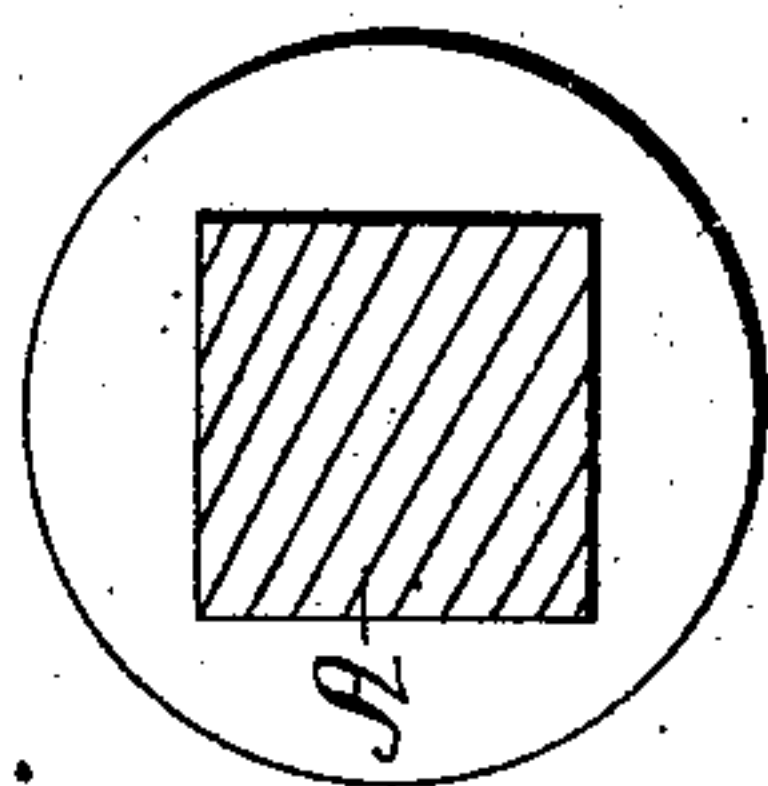


Fig. 3.

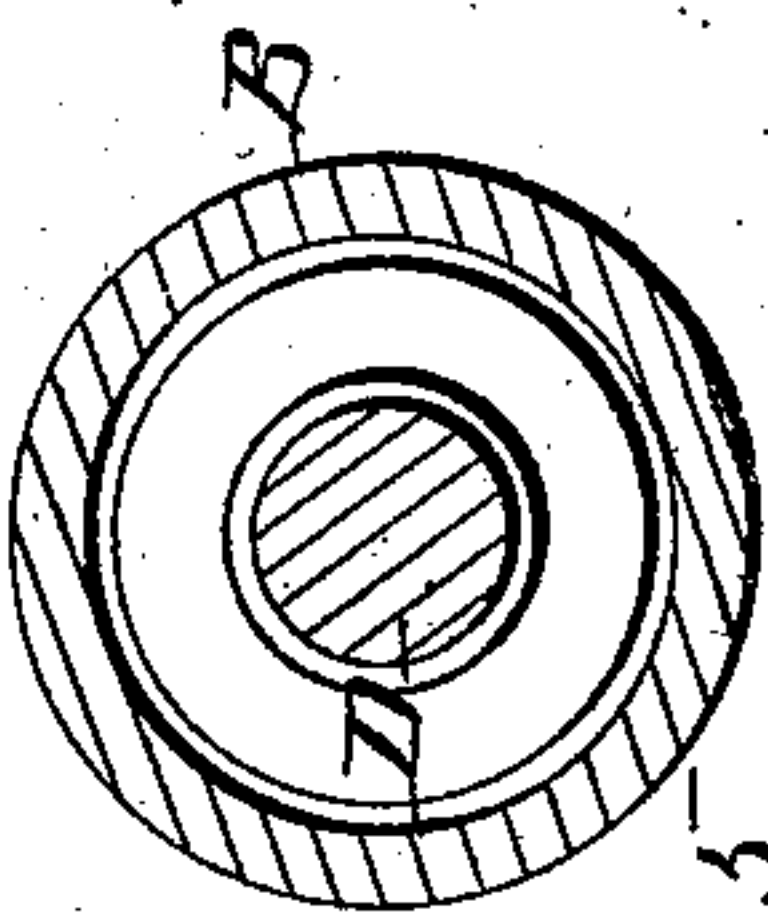


Fig. 5.

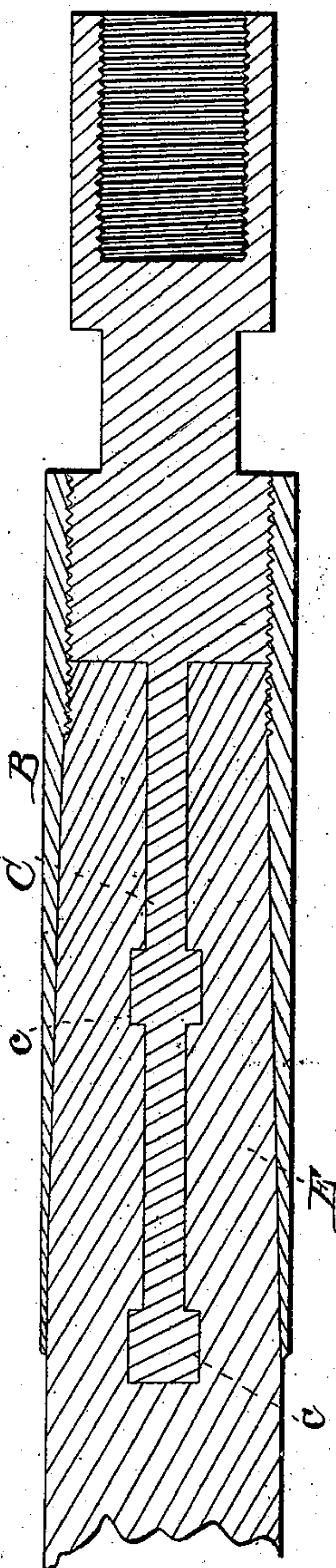
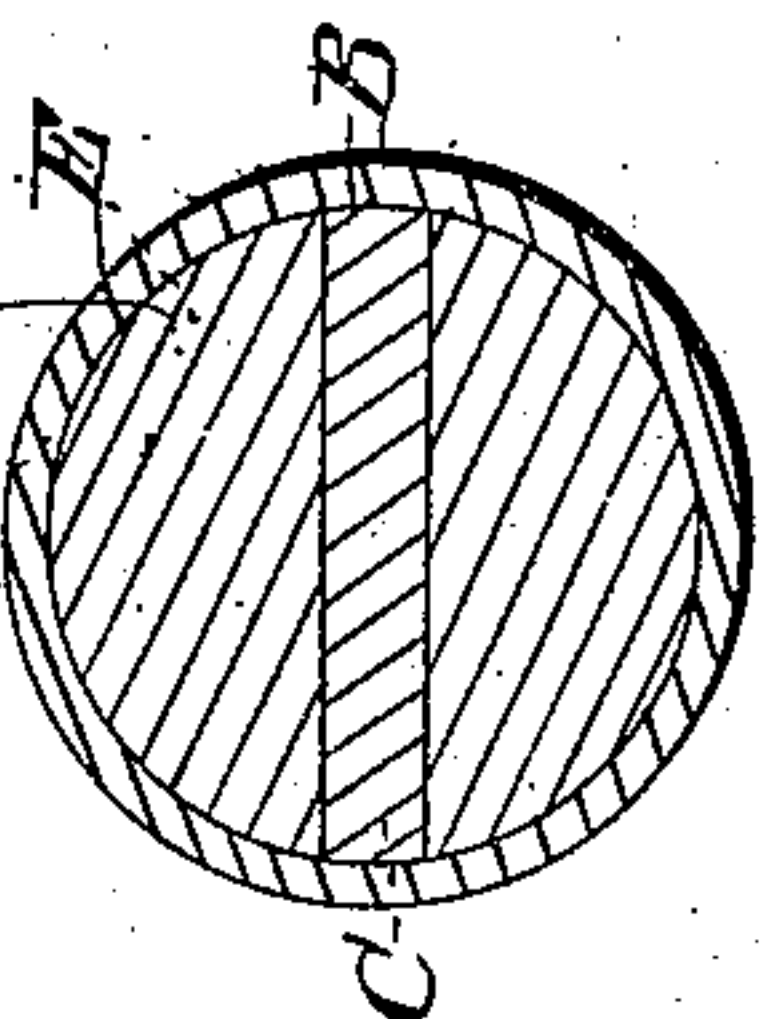


Fig. 2.



Witnesses;
A. D. Gallantini
Fred. Andre

Inventors;
A. Good Jr. & S. Strouse
per J. Snowden Bell. Atty.

United States Patent Office.

ADAM GOOD, JR., AND SIMON STROUSE, OF TITUSVILLE, PENNSYLVANIA.

Letters Patent No. 81,270, dated August 18, 1868.

IMPROVEMENT IN CONNECTIONS FOR WOODEN RODS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, ADAM GOOD, Jr., and SIMON STROUSE, both of Titusville, in the county of Crawford, and State of Pennsylvania, have invented certain new and useful Improvements in Sucker-Rod Joints for Oil- Wells, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which make part of this specification, and in which—

Figure 1 represents a longitudinal section of our improved sucker-rod joint

Figure 2 a transverse section of the same, at the line *x x* of fig. 1,

Figure 3 a similar section, at the line *y y* of fig. 1,

Figure 4 a similar section, at the line *z z* of fig. 1, and

Figure 5 a longitudinal section, showing a modification of our invention, in which the bolts are dispensed with.

The object of our invention is to provide a simple and efficient connection or joint for the sucker-rods of oil-wells, &c., which shall firmly unite the sections of the rod, without risk of becoming disconnected, or of losing the tools in the well, by which accident great expense is entailed, and the abandonment of the well sometimes necessitated; to which end our improvement consists in inserting flat metallic tongue-pieces, in longitudinal slots, in the ends of the sections to be united, said tongue-pieces being held in the wood by transverse projections formed upon them, and clamped therein by a tube, which embraces the end of the section, which tube is made tapering inside, so as to draw the wood together, and hold the tongue-piece firmly therein. The tube and tongue-piece are connected by means of a bolt, which bears against a collar on the inside of the tube, and screws into a nut, formed upon the outer end of the tongue-piece, so as to draw the tube further upon the wood, in case of shrinkage, &c., and the tubes are connected with each other by a union-coupling, having a male screw upon each end, which screws into a thread cut upon the inside of the tube.

In the accompanying drawings, which show a convenient arrangement of parts for carrying out the objects of our invention, E represents a portion of one of the sections of a sucker-rod, and C a metallic tongue-piece, inserted in a longitudinal slot in its end. The tongue-piece C is held in the wood by means of the transverse projections *c*, formed upon it. The outer end of the tongue-piece is enlarged and formed into a nut, C'. A tube, B, made tapering on its inside, is driven over the section E, which is made similarly tapering towards its end, by which means the wood is compressed upon the tongue-piece C, and holds it firmly in position. A collar, *b*, is formed upon the inside of the tube B, through which a bolt, D, passes, and bears against it by means of its collar *d*. The bolt D screws into the nut C' of the tongue-piece, and connects it firmly with the tube B, which can be drawn up further on the section E, when desired, by means of the bolt D and nut C'. By this means, should the tongue-piece become slack in the section by shrinkage of the wood, it can be readily tightened.

The tubes are connected by the union-coupling A, the central part of which is formed of square or other convenient polygonal cross-section, so as to be turned by a wrench, and having male screws *a* upon its ends, by which it connects with the tubes which are to be united. Fig. 5 shows a modification of our invention, in which the tongue-piece C screws into the tube B, and the tongue-pieces are secured together directly, without the intermediation of the union-coupling A. The projections in this case are made square, instead of curved.

Our invention provides a strong, safe, and simple joint, and without dangerously weakening the ends of the sections, as is done in many joints in common use. It is, moreover, applicable to the drilling-poles of oil, salt, or artesian wells, insuring the operator against risk of disconnection, or losing tools in the well, which, in such cases, would be very disastrous. In some joints in common use, rivets are employed, which become loose and drop out, and, falling into the pump, injure it to such an extent that the tubing and pump must be drawn out of the well at great expense.

Having thus fully described our invention, what we claim therein as new, and desire to secure by Letters Patent, is—

As combined with the union-joint A, the socketed connection, consisting of the tapering tube B, the tongue C, with its enlargements, and the adjusting-screw D, all substantially as shown and described.

ADAM GOOD, JR. [L. S.]

SIMON STROUSE. [L. S.]

Witnesses:

J. SNOWDEN BELL,

FRED X ANDRÉ.