

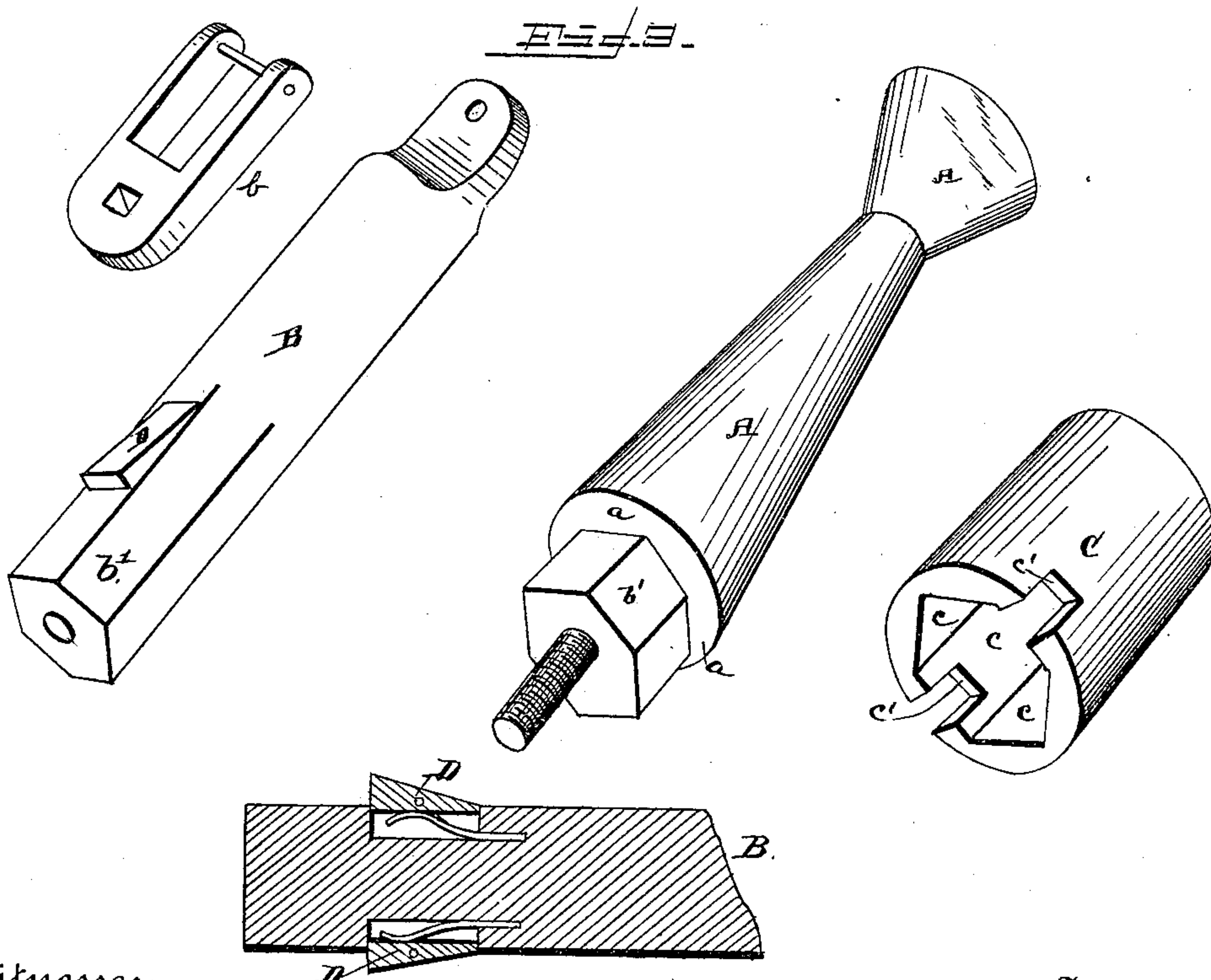
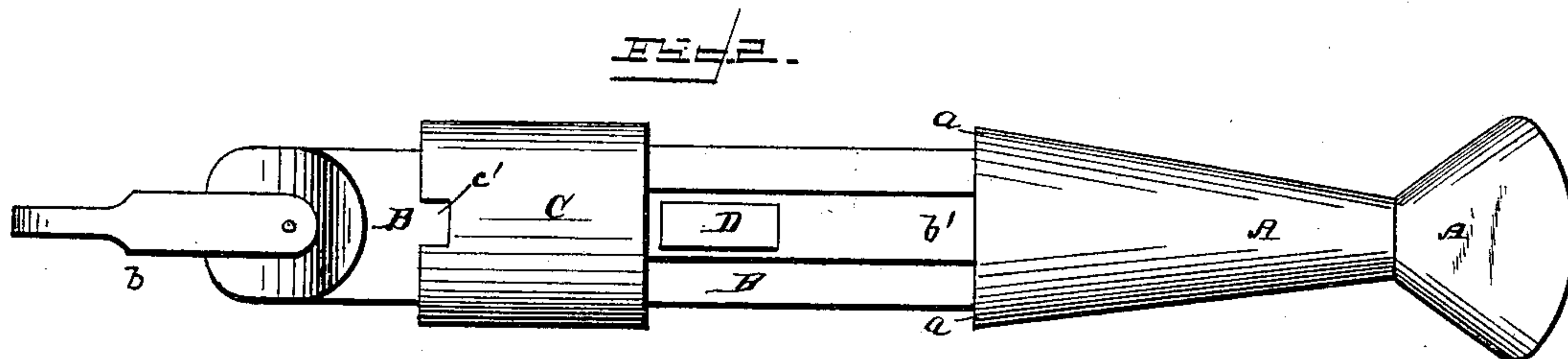
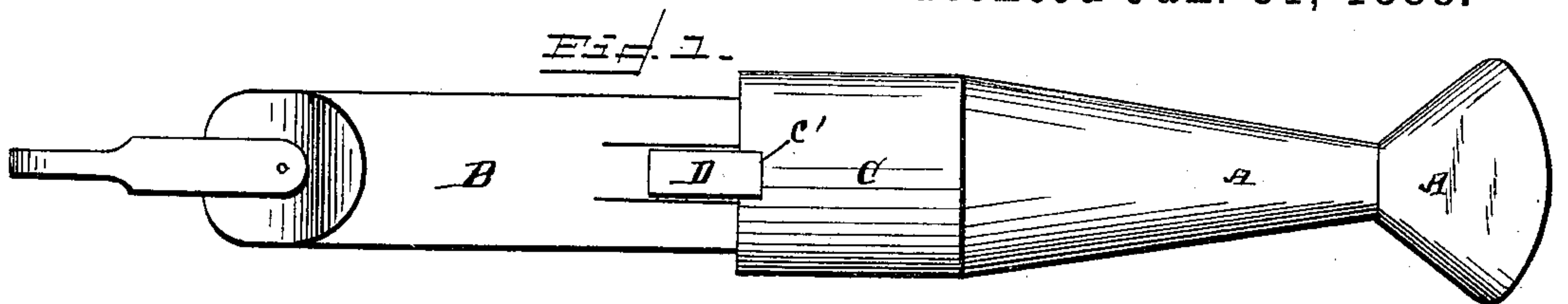
(No Model.)

J. BOTTOMES.

ROD COUPLING.

No. 377,186.

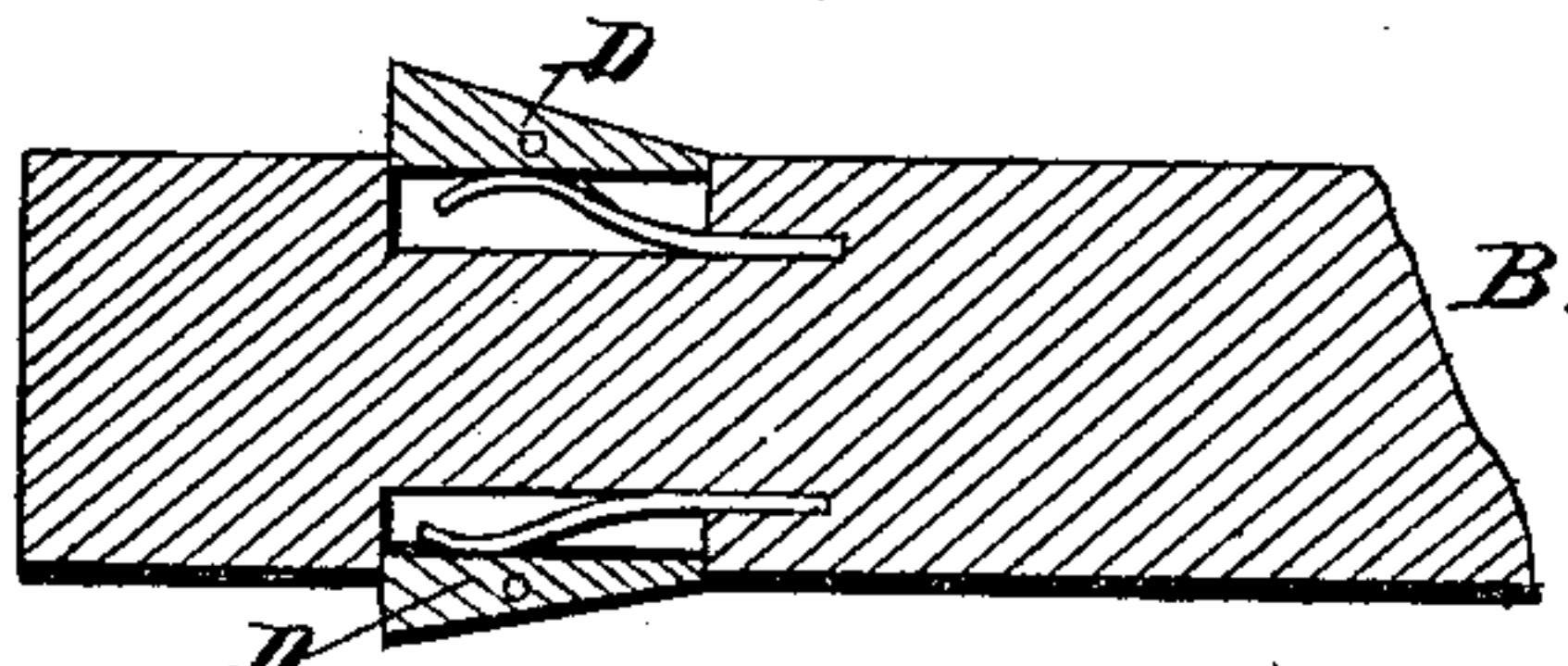
Patented Jan. 31, 1888.



Witnesses

*W. H. Humphrey*  
*John H. Diggers*

Fig. 4.



Inventor  
*James Bottomes*  
By *his* Attorneys

*C. A. Snowdon*

# UNITED STATES PATENT OFFICE.

JAMES BOTTOMES, OF SANDY RUN, PENNSYLVANIA.

## ROD-COUPLING.

SPECIFICATION forming part of Letters Patent No. 377,186, dated January 31, 1888.

Application filed July 27, 1887. Serial No. 245,451. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES BOTTOMES, a citizen of the United States, residing at Sandy Run, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Improvement in Rod-Couplings, of which the following is a specification.

My invention relates to an improvement in rod-couplings; and it consists in the combination and arrangement of devices, which will be more fully hereinafter described, and pointed out in the claim.

In the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, Figure 1 is a side elevation of my improved construction. Fig. 2 is a similar view with the locking collar or sleeve raised. Fig. 3 is a perspective of the parts separated. Fig. 4 is a section through the locking-catches.

A indicates the bit, of any preferred form, having a stock, B, to which it is removably secured by a screw-thread, as in the ordinary form of bit and stock. The upper end of the stock is provided with a swivel-link, b, for connection to the sucker-rod, as will be readily understood.

The outer surface of the stock and bit adjacent to their point of union is formed with plane faces in polygonal form, as at *b'*, and the bit is formed with a shoulder, *a*. A sleeve, C, is mounted on the stock B, the inner surface of which is correspondingly formed with polygonal faces *c*, which engage with the surface *b'*. The upper portion of the said sleeve C is also provided with two slots, *c'*, which are adapted to be engaged by two spring-catches, D, mounted in the stock B. When the bit and

stock have been united, as set forth, the sleeve C is drawn down over the joint against the shoulder *a*. When the sleeve will have reached the shoulder *a*, the spring locking-catches D pass through the slots *c'*, and thereby secure the said sleeve down on the joint. The sleeve is prevented from turning by the construction of the polygonal surfaces, as will be readily understood.

The novelty and utility of my improved device being obviously apparent, it is unnecessary to further enlarge upon the same herein.

By my improvement the sleeve C will effectually hold the bit A from unscrewing. It is well known that drill-bits as ordinarily constructed frequently unscrew and, dropping down into the well, are lost. By my improvement this defect is overcome.

I may make the surfaces *b' c* triangular, or hexagonal, or octagonal, as preferred.

Having thus described my invention, I claim—

A rod-coupling comprising the bit-stock and bit having the angular outer surfaces, *b'*, and the bit being further provided with the shoulder *a*, the sleeve C, having the inner angular surface and the slots *c'*, and the spring-catches D, adapted to pass through said slots *c'* to hold the sleeve down over the joint of the bit and stock, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES BOTTOMES.

Witnesses:

JOHN S. MILLER,  
O. F. TURNBACH.