

G. H. FOX & H. F. WHEELER.
Double-Barrelled Guns.

No. 196,749.

Patented Nov. 6, 1877.

Fig. 4.

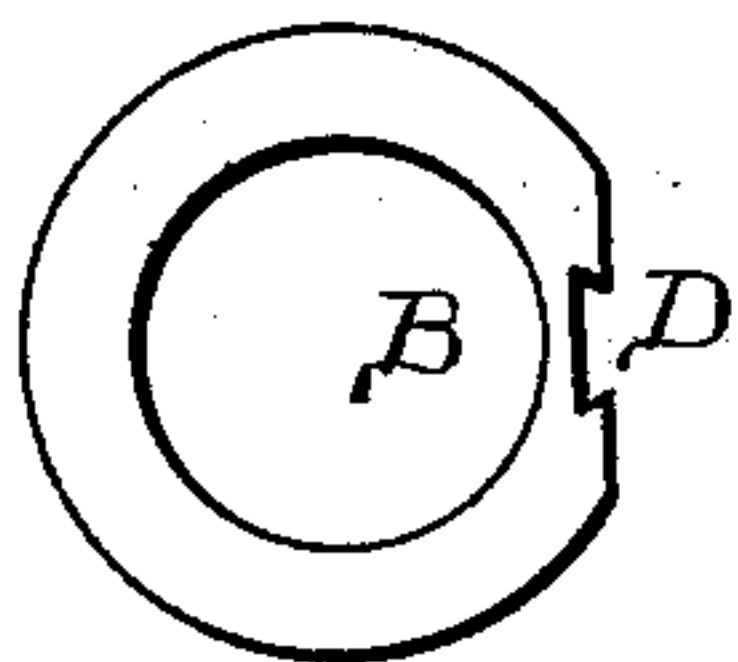


Fig. 1.

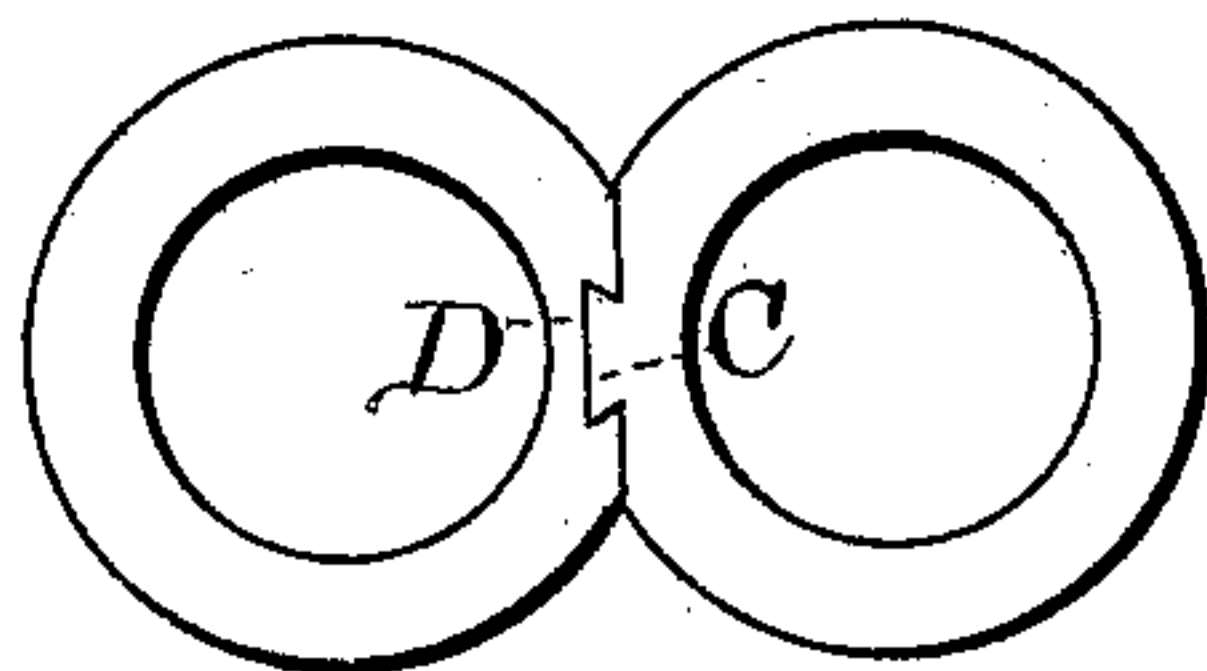


Fig. 5.

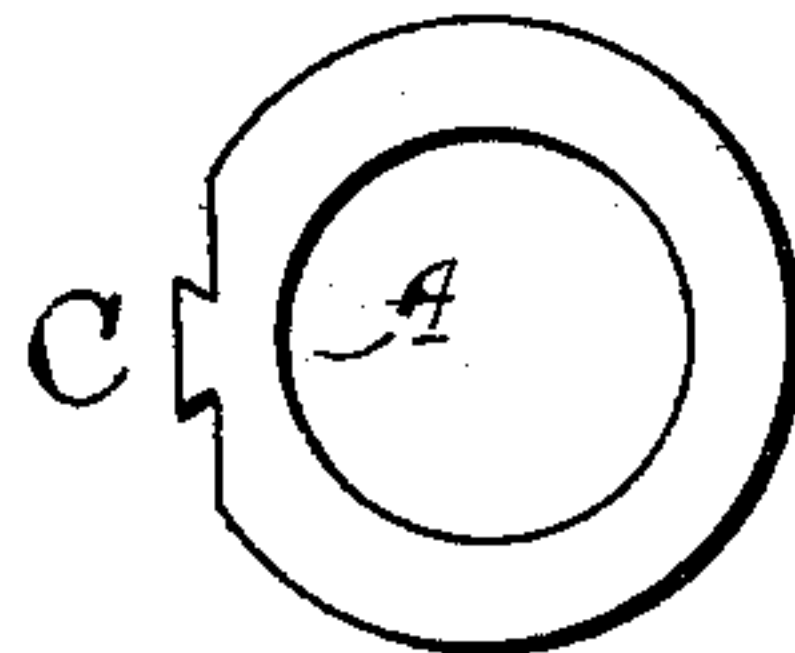


Fig. 3.

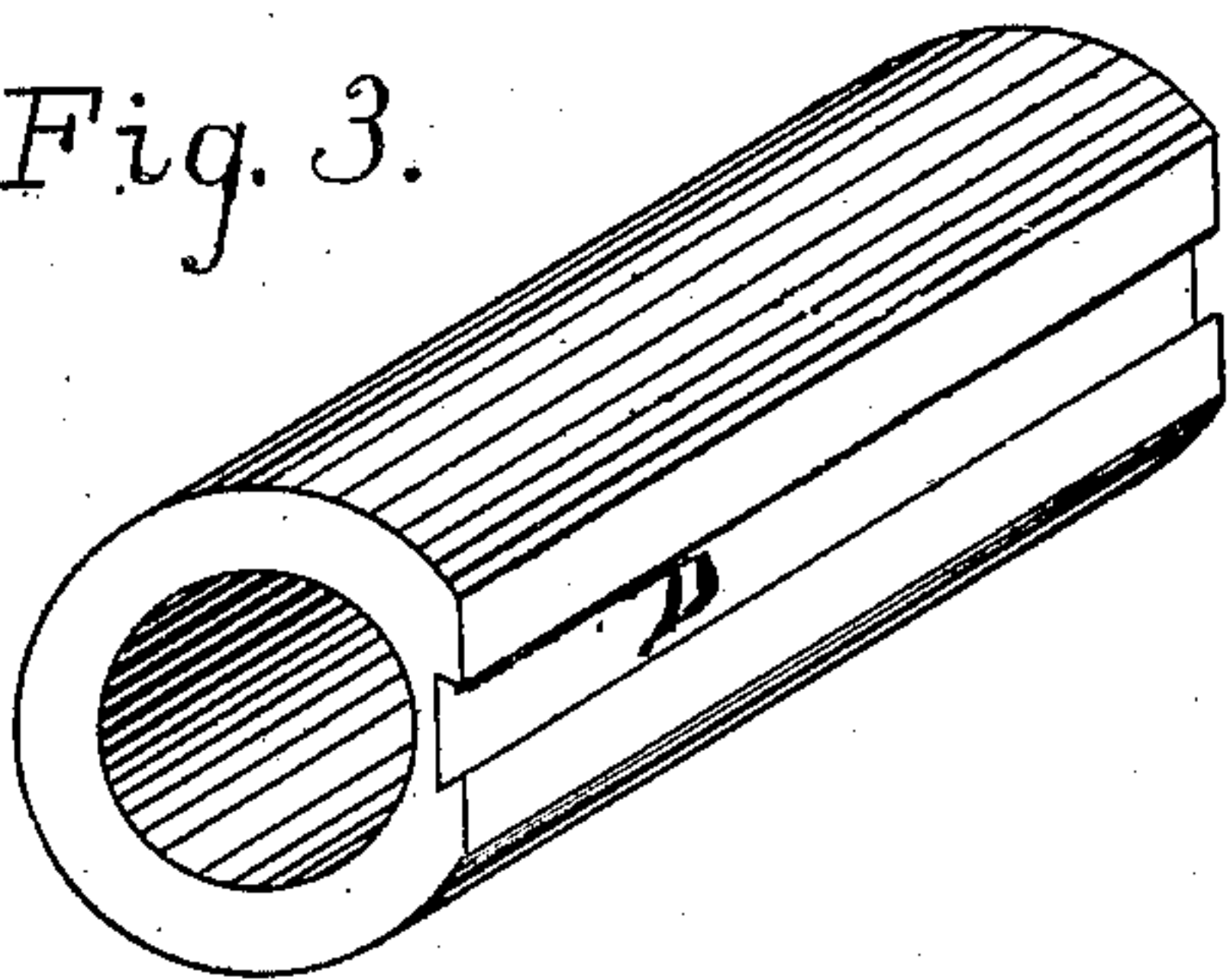
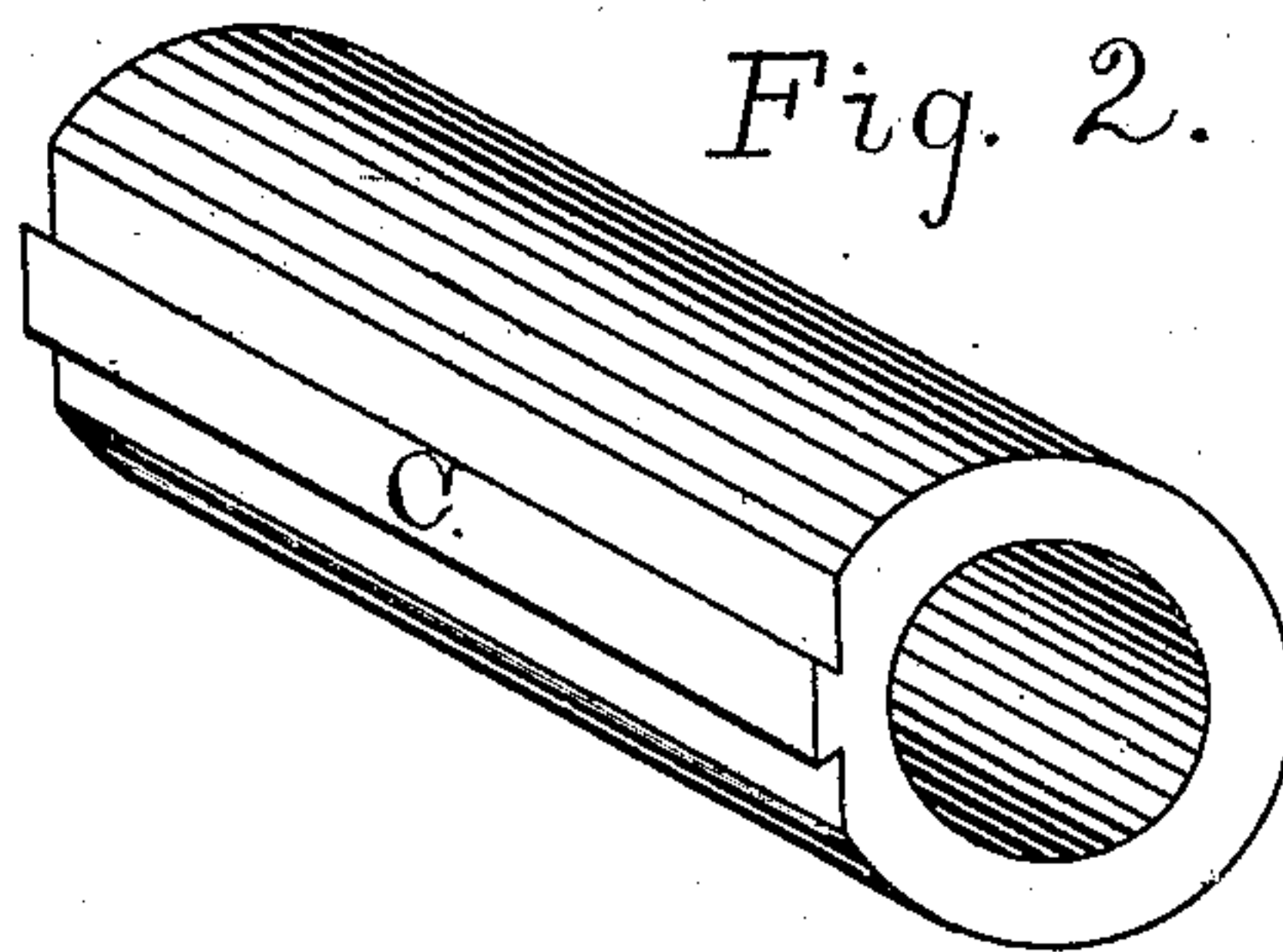


Fig. 2.



ATTEST

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UNITED STATES PATENT OFFICE.

GEORGE H. FOX AND HENRY F. WHEELER, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN DOUBLE-BARRELED GUNS.

Specification forming part of Letters Patent No. **196,749**, dated November 6, 1877; application filed June 22, 1877.

To all whom it may concern:

Be it known that we, GEORGE H. FOX and HENRY F. WHEELER, of Boston, Suffolk county, Massachusetts, have invented an Improvement in Double-Barreled Guns, of which the following is a specification:

Heretofore the two barrels of doubled-barreled sporting-guns have been united by flattening the adjacent sides and brazing the parts together.

This operation of brazing has the effect of discoloring and sometimes scaling—on account of the great heat required—the barrels, and in some instances springs them, and is objectionable in other respects. Soft-soldering has been found sufficient for muzzle-loading barrels, but not for breech-loading; hence the breech ends of the latter are brazed.

Our present improvement will be found to consist in effecting a joint between the two barrels by intersecting one with the other in a suitable manner, notably by means of a spline-and-groove connection, ordinary solder, which has no objectionable effects, being employed in connection therewith simply to prevent the slipping of the two barrels one upon the other.

The drawings accompanying this specification represent, in—

Figure 1, a cross-section of a pair of gun-barrels united by our method. Figs. 2 and 3 are inner side views of a portion of the two barrels, and Figs. 4 and 5 are sections of each barrel.

In these drawings, A and B represent the two barrels of a double-barreled gun. C represents a longitudinal rib or spline extending the length of the barrel A, and parallel therewith, and having its edges undercut to produce a dovetail. D represents a channel or groove cut longitudinally in the opposite barrel B, and adapted to receive the spline C with a close joint.

The rib C is pushed into the groove D until the rear ends of the barrels are flush, and the joint is secured by soft solder, to prevent end slipping of the two barrels one upon the other, and aid in uniting them firmly together.

A joint of this character possesses greater rigidity and strength than brazing. It does not unduly heat or discolor the barrels, and no liability of springing the barrels in the use of solder results.

We have represented the rib and channel which unite the two barrels as extending longitudinally of the axes of the latter. We do not confine ourselves to this arrangement, as it may be found in practice that equally good results will follow if several ribs and channels are employed extending transversely of the said barrels at right angles or obliquely to their axes. Nor do we confine ourselves to the employment of soft solder or other fusible metal as a means for preventing slipping of one barrel upon the other, for, although we prefer to proceed in this manner, it may be dispensed with under some circumstances.

The rib and groove, aside from any element of strength or adhesion they possess as regards the two barrels, serve an important function in the fact alone that they hold the two barrels firmly in correct position while being soldered, and in this respect alone exhibit great utility.

We claim—

A pair of gun-barrels united by means of one or more splines and grooves, essentially as and for purposes stated.

GEO. H. FOX.
HENRY F. WHEELER.

Witnesses:

C. F. WM. SMITH,
WM. C. DAVIS,
W. E. BOARDMAN.