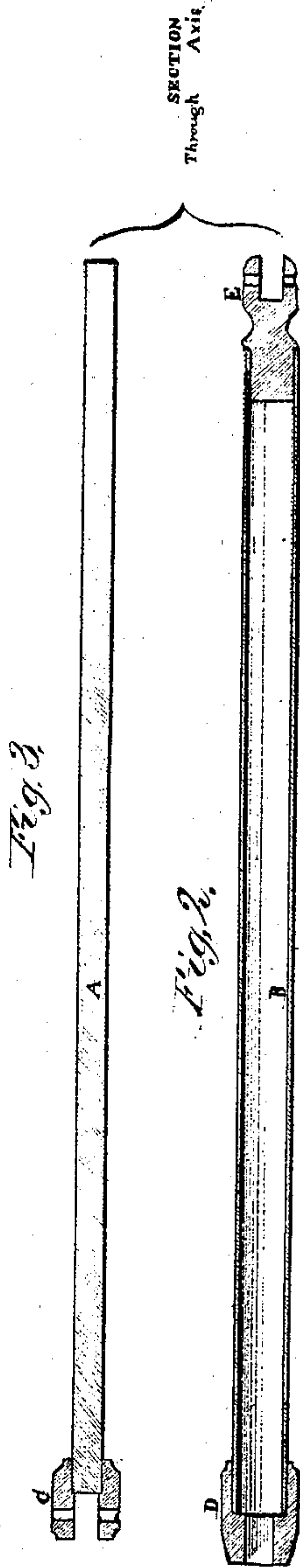
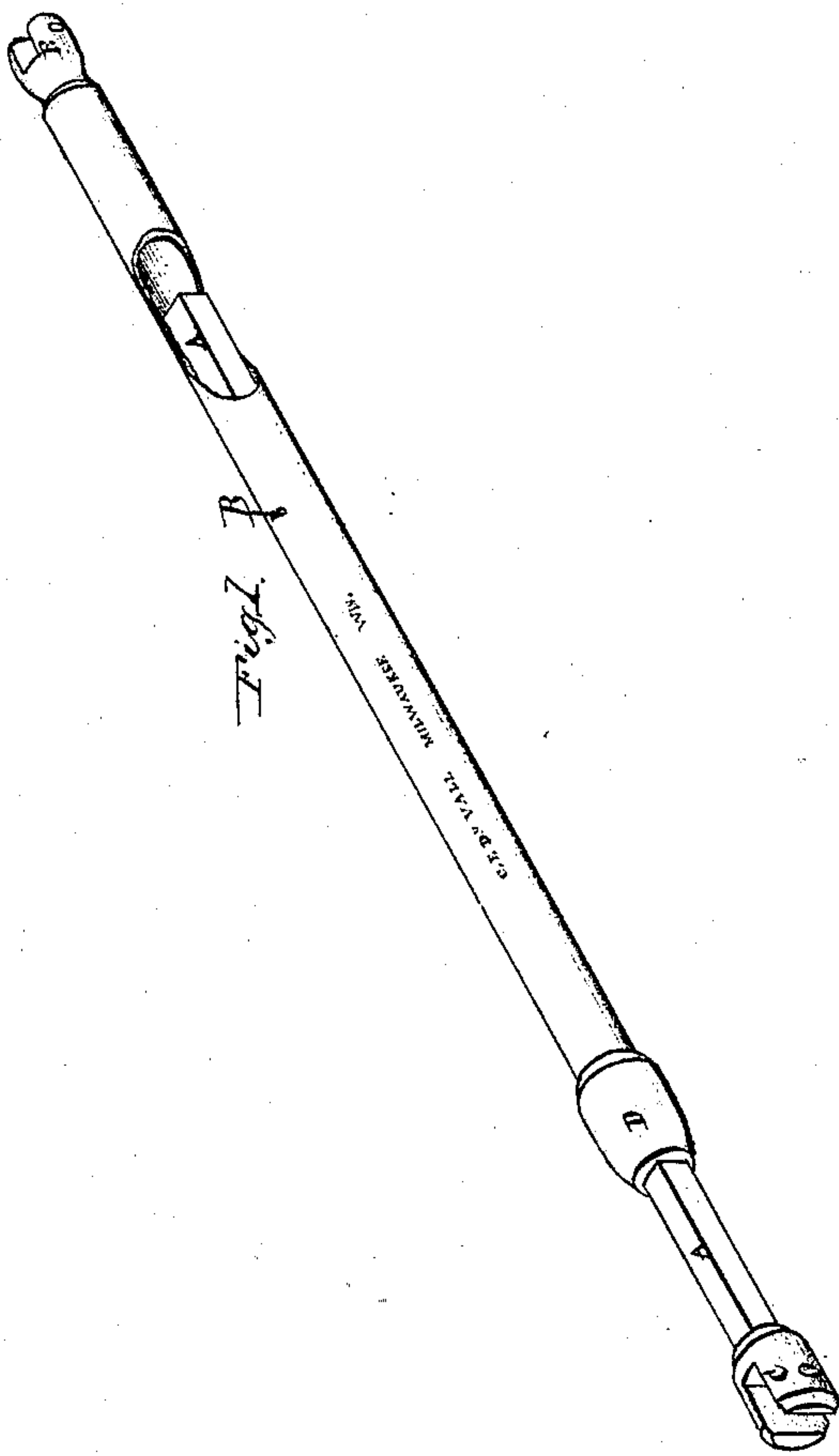


C. F. Du Vall,

Filman.

No. 99657.

Patented Feb. 8, 1870.



Witness,
H. B. Smith
W. M. H. H. H.

Inventor,
Chas. F. Du Vall

United States Patent Office.

CHARLES F. DU VALL, OF MILWAUKEE, WISCONSIN.

Letters Patent No. 99,657, dated February 8, 1870; antedated February 5, 1870.

IMPROVED SHAFT-COUPLING.

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

To all whom it may concern :

Be it known that I, CHARLES F. DU VALL, of the city and county of Milwaukee, and State of Wisconsin, have invented a new and useful Improvement in Shaft-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a view of my invention, with the side broken out;

Figure 2, a sectional view of the hollow socket; and

Figure 3, a sectional view of the inside or solid piece.

Similar letters of reference, in each of the figures, indicate corresponding parts.

The object of my invention is to produce a coupling that may be lengthened or shortened, as circumstances may require.

A is a square piece, passing into B.

B, the socket, for A to pass into.

C, coupling or knuckle, on one end of the piece A.

D, a thimble, on the end of B, with a square hole, just the right size for A to pass into.

E, a coupling or knuckle, on the other end of socket B.

Operation.

Shove piece A, through thimble D, into socket B, up as far as may be necessary to give it the right length, and couple the two ends C and E to a shaft, and the coupling is ready for use.

This coupling may be lengthened out or shoved together, as circumstances may require, from the shortest to the longest distance it may be made.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A coupling, consisting of pieces A, B, and D, constructed substantially as described.

2. A, B, C, D, and E, constructed substantially as described.

CHAS. F. DU VALL.

Witnesses:

J. B. SMITH,

W. M. HORNOR.