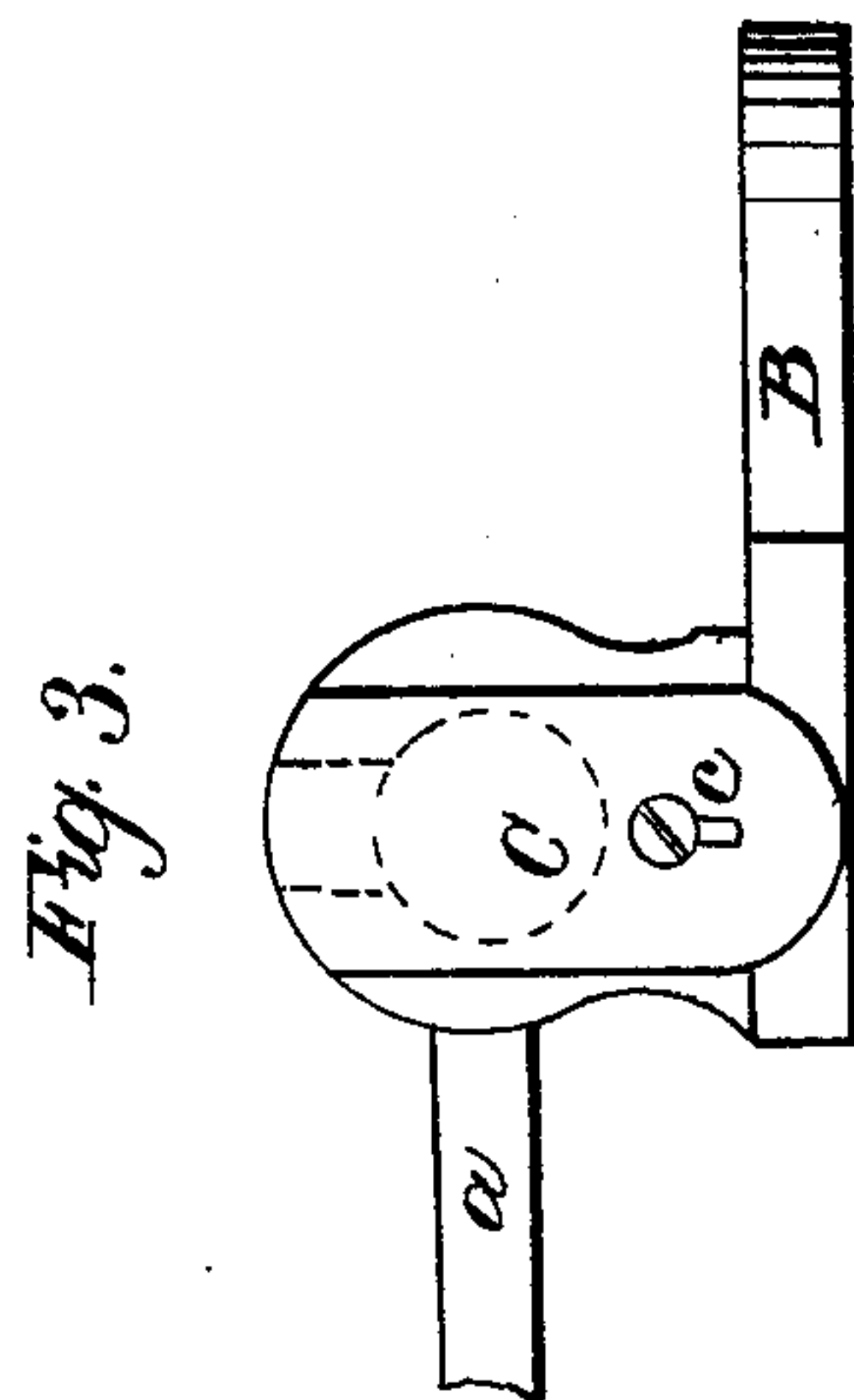
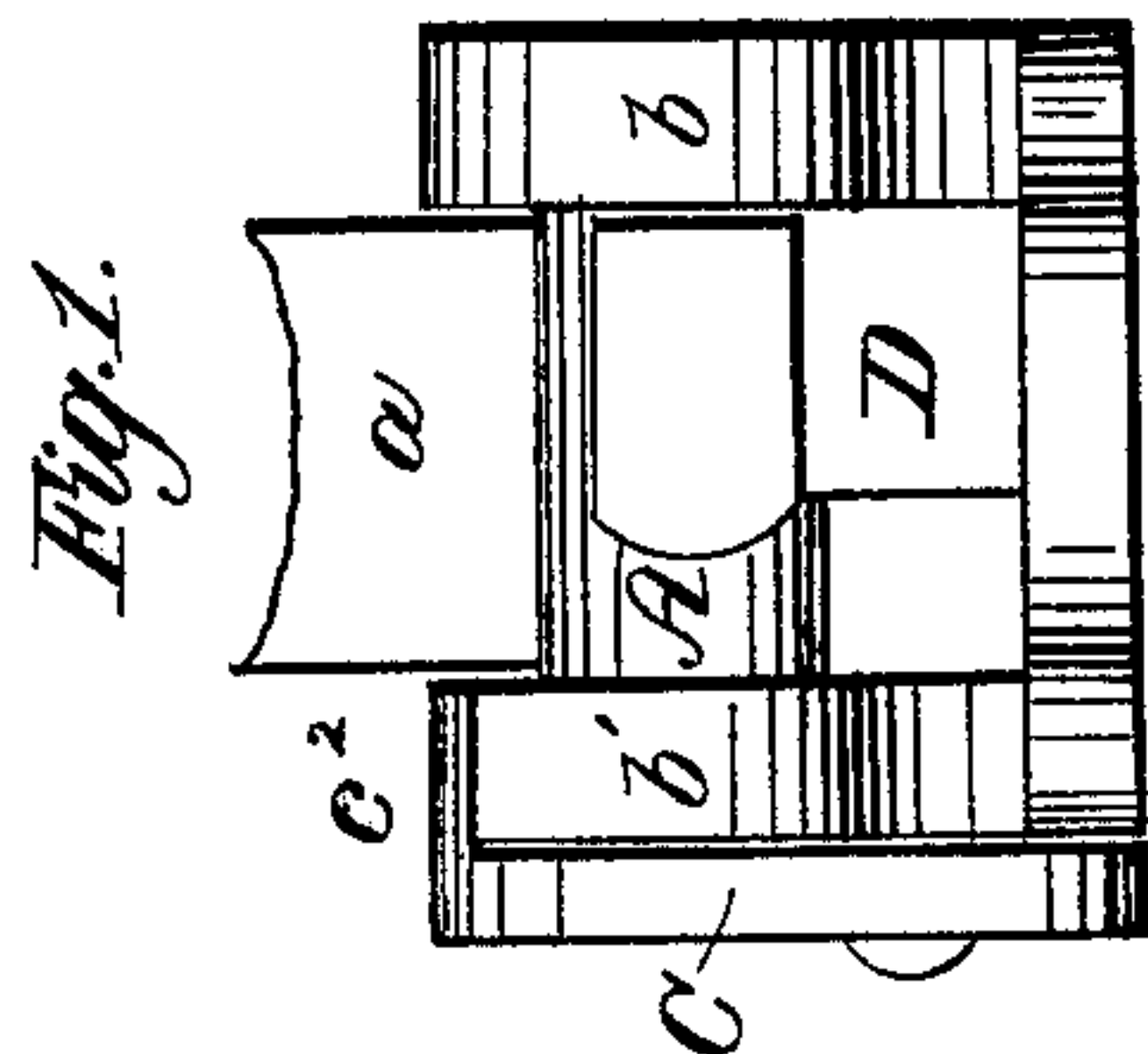
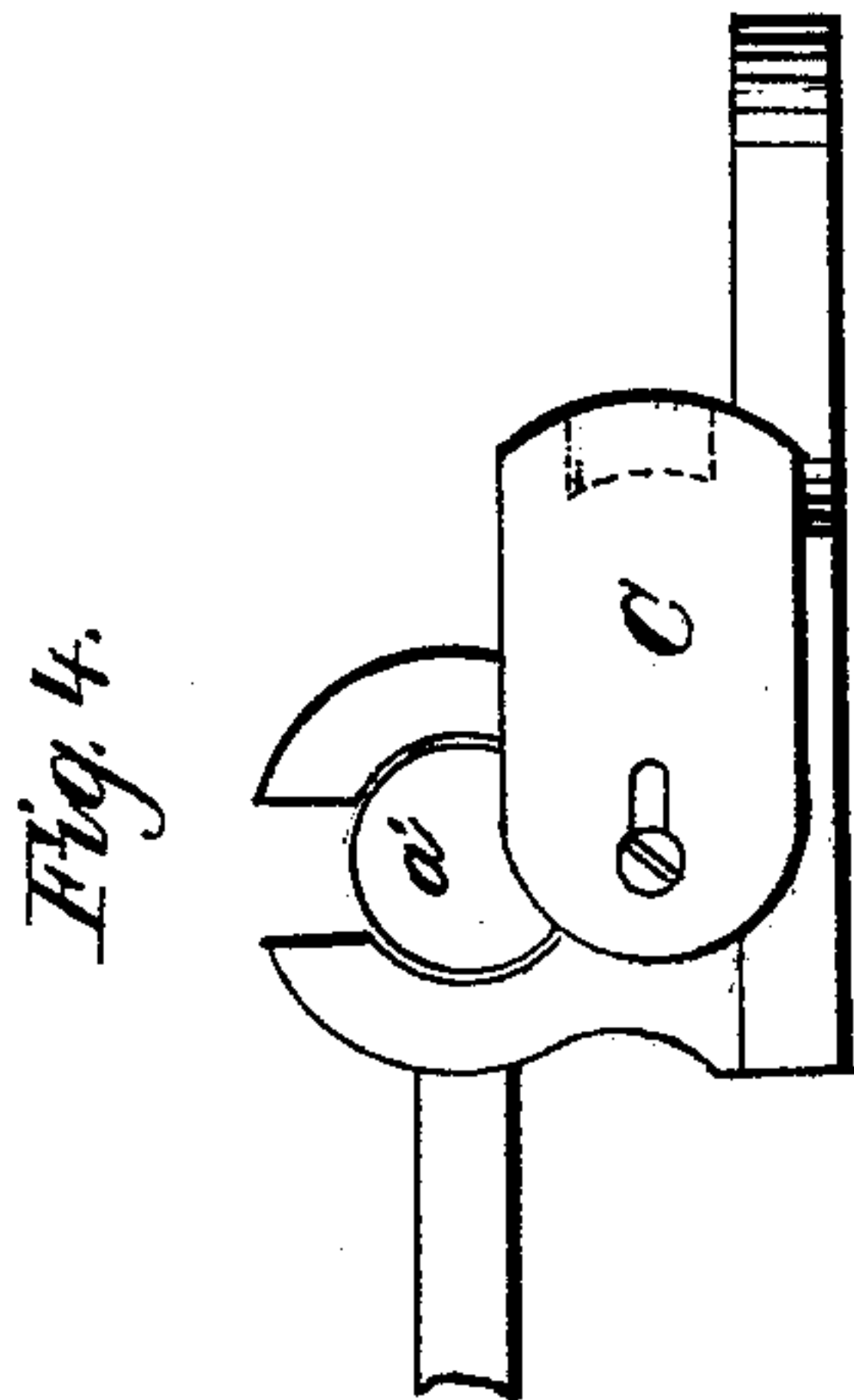
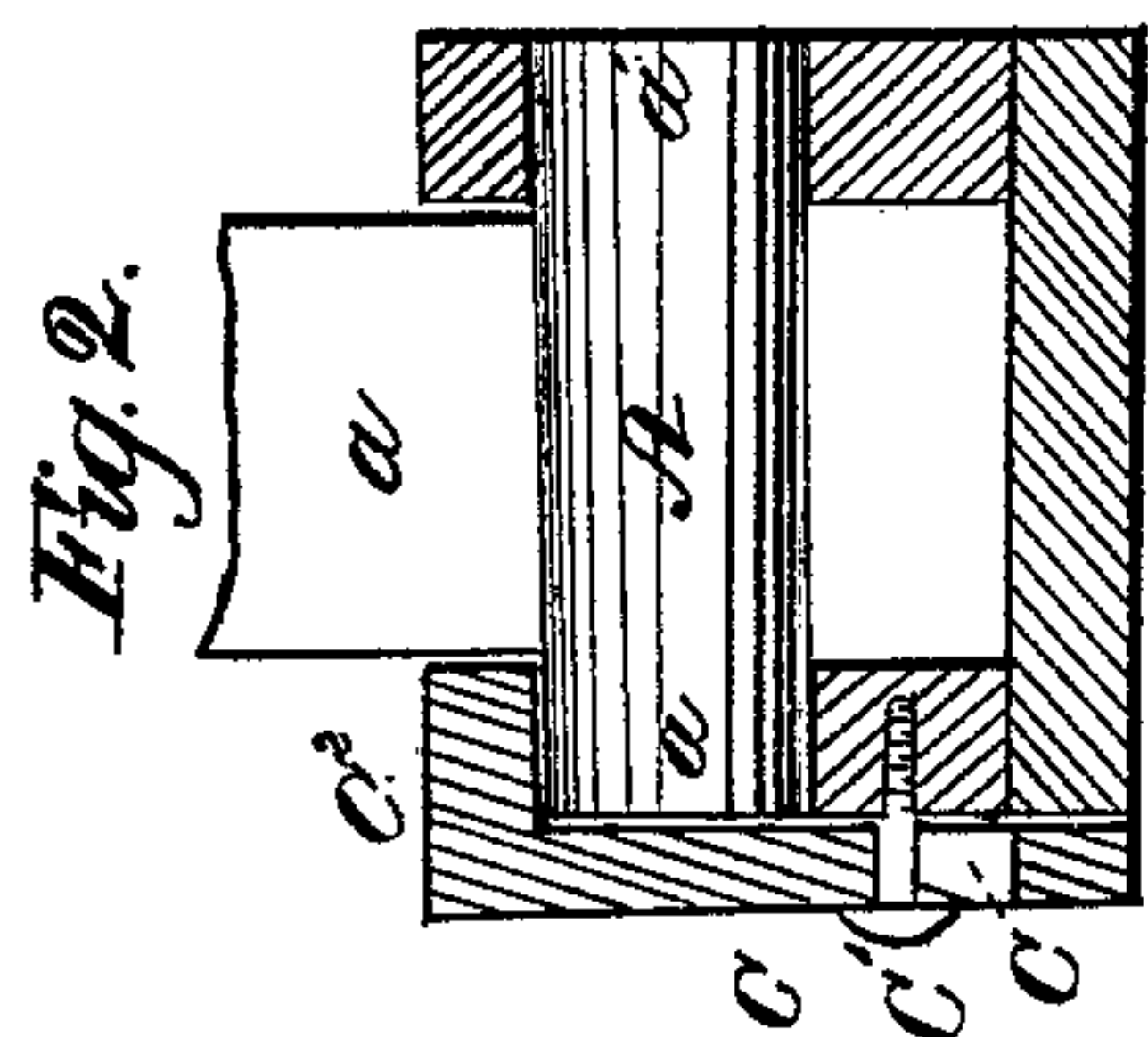


SPALDING & SOUTHWELL.

Thill Coupling.

No. 91,280.

Patented June 15, 1869.



Witnesses.
C. F. Punn
Fred Thomas

Inventors.
W. C. Spalding
Charles P. Southwell
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Atty

United States Patent Office.

WILLIAM C. SPALDING AND CAROLUS P. SOUTHWELL, OF WATERTOWN, WISCONSIN.

Letters Patent No. 91,280, dated June 15, 1869.

IMPROVEMENT IN THILL-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 we, WILLIAM C. SPALDING, and CAROLUS P. SOUTHWELL, of Watertown, in the county of Jefferson, and State of Wisconsin, have invented a new and useful Shaft and Pole-Coupling for Carriages; and we do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to couplings for carriage-poles or shafts; and

It consists mainly in the employment of a slotted side piece, having a lip fitting into, and opening in one of the ears, through which the shank of the coupling is removed, by means of which the coupling is made secure, when in use, and is easily removed, when desired.

It also consists in the employment of a metal spring, which presses against the head, or movable part of the joint, and makes a tight bearing, and also prevents all noise.

The details of construction will be fully described hereinafter.

In the drawings—

Figure 1 is an end elevation;

Figure 2, a vertical central section;

Figure 3, a side elevation; and

Figure 4, a similar elevation, with the side piece swung out of place.

To enable others skilled in the art to which my invention appertains, to make and use the same, I will proceed to describe fully its construction and operation.

A represents the bearing, or movable part of the joint.

This is made solid, with the shank *a*, and round bearing-surfaces *a' a'*.

B represents the clip, with the ears *b b'*, the latter of which is open at the top, as shown, this opening corresponding in size with the thickness of the shank *a*.

C represents a side piece, which is provided with the

slot *c*, as shown, and has a vertical swinging motion upon the screw *c'*.

It has also the lip, or projection *c²*, which closely fits the opening in the ear *b'* as shown.

D represents a metal spring, which presses snugly against the head, A, when the latter is in place.

The operation is as follows:

When it is desired to attach the pole or shafts, they are placed in a perpendicular position, or nearly so, and the head, A, is slipped into ears *b b'*, the opening in the latter permitting the shank *a* to pass into place. The shafts or pole are now let down into place.

It will be observed, that in this position the fastening is secure, and that no detachment can take place, unless the shafts or pole are again elevated, until the shank *a* is opposite the opening in the ear *b'*.

To make the fastening still more secure, however, and to exclude the dust and dirt from the joints, the side piece C is swung around into place. Its lip *c²* fits snugly into the opening, and makes the fastening complete.

The side pieces can be secured in place, by adjusting the screw *c'*.

The spring D makes a tight bearing, and thus prevents, in a great measure, the wearing of the joint.

By the construction herein described, a simple coupling is obtained, which is exceedingly durable, and easily attached and detached.

Having thus fully described my invention,

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

The head, A, clip B, with ears *b b'*, and side piece C, having the lip *c²*, with or without the spring D, when constructed and arranged as described, for the purpose set forth.

This specification signed and witnessed, this 26th day of February, 1869.

WILLIAM C. SPALDING.

CAROLUS P. SOUTHWELL.

Witnesses:

WM. R. SAUNDERS,

F. W. GOHRER.