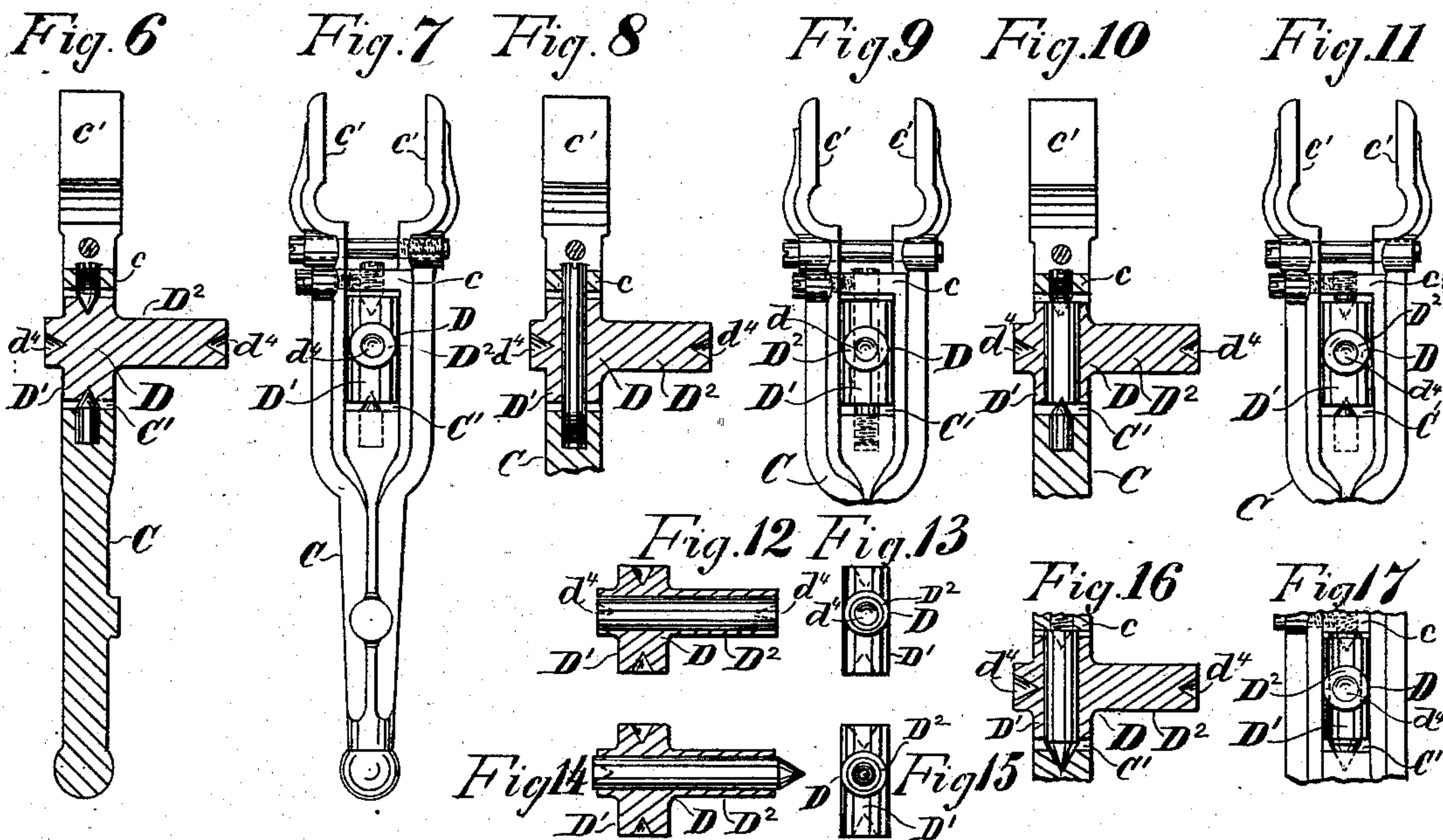
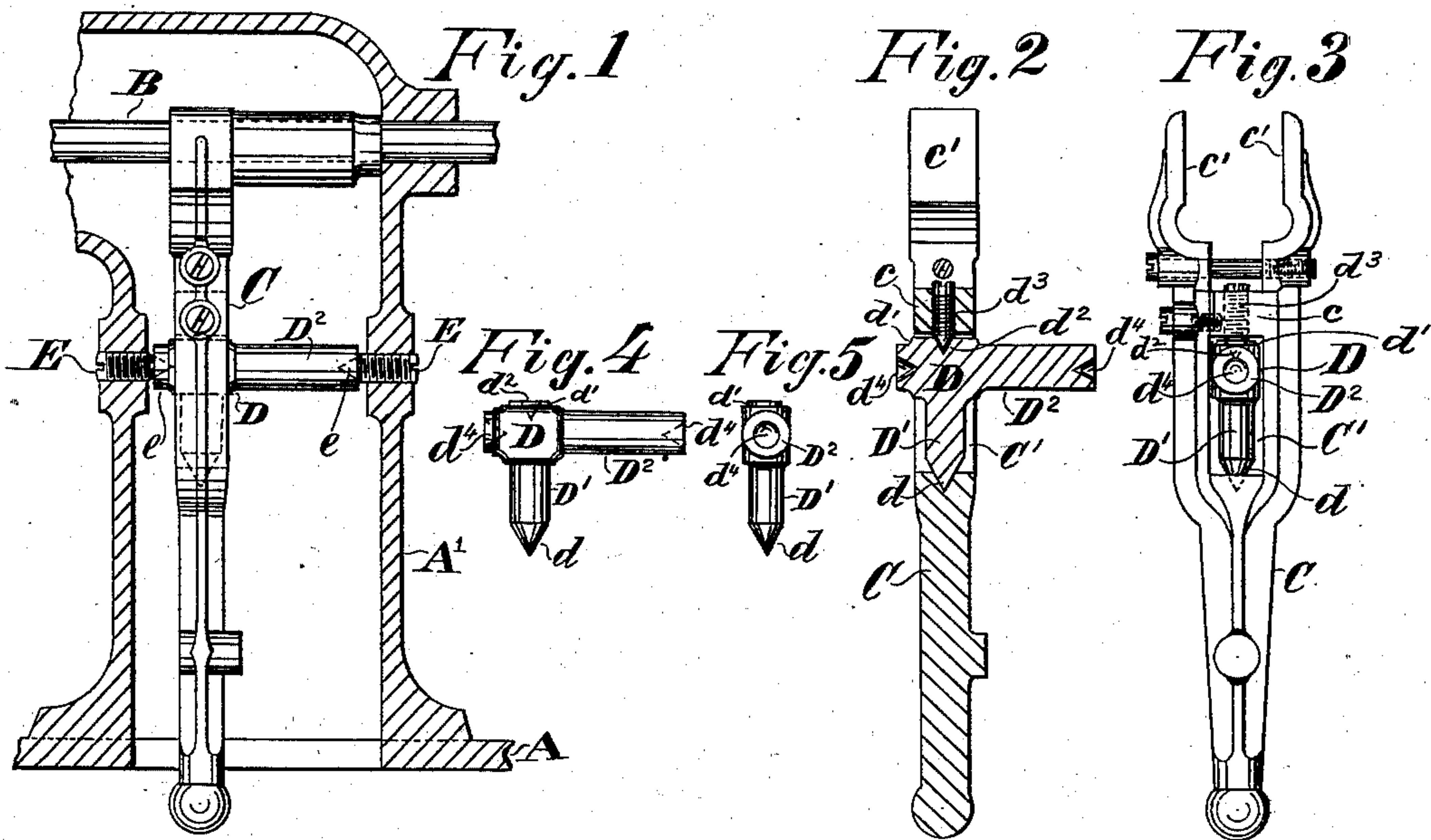


(No Model.)

J. TRIPP.
SEWING MACHINE.

No. 282,406.

Patented July 31, 1883.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES TRIPP, OF NEW YORK, N. Y., ASSIGNOR TO CHARLES T. BECKWITH
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SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 282,406, dated July 31, 1883.

Application filed December 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES TRIPP, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Sewing-Machines, of which the following is a specification.

My invention relates to improvements in the construction and means of supporting what is commonly known as the "shuttle-lever connection."

The nature of my invention will be fully explained by reference to the accompanying specification and the drawings annexed, which form part of the same.

Referring to the drawings, Figure 1 is a vertical section of the rear end of a sewing-machine arm and post. Fig. 2 is a vertical central section of a shuttle-lever connection constructed according to my invention. Fig. 3 is a front view of the same. Figs. 4 and 5 show detail views of parts. Figs. 6 and 7 show, respectively, a vertical section and a side view of a slight modification. Fig. 8 is a sectional view; Fig. 9, a side view of another modification. Fig. 10 is a central section, and Fig. 11 a side view, of another slight modification of my invention. Figs. 12 to 17 show slight modifications of construction.

In each of the views similar letters of reference are employed to indicate corresponding parts wherever they occur.

A represents part of the main casting forming the rear end of a sewing-machine and post, A'.

B is the main shaft, which is provided with the necessary cams and eccentrics.

C is my improved shuttle-lever connection, which, as shown by the drawings, is constructed with a compound pivoted bearing, D, by means of which I am enabled to support the shuttle-lever connection C securely and accurately in position with great facility and at a largely reduced cost. The compound bearing D is constructed of two shafts, D' D², arranged at right angles to each other. The shaft D' is arranged vertically, and in the ar-

range ment shown by Figs. 1 to 5, inclusive, is formed with a conical end, *d*, adapted to be received into a corresponding seat in the lower end of an opening, C', formed in the shuttle-lever connection C, while at its upper end, *d'*, it is formed with a conical recess, *d*², adapted to receive the end of a pivoting-screw, *d*³, supported in a cross-piece, *c*, forming part of the shuttle-connection C. The shaft D² in the arrangement shown by Figs. 1 to 5 is supported in position with the post A' by means of centering-screws E E, formed with conical ends *e e*, adapted to be received within correspondingly-formed bearings *d*⁴ *d*⁴ in the ends of the shaft D².

By means of my improved compound pivoted bearing D, I am enabled to obtain an automatic adjustment of the surfaces *c' c'* of the fork of the shuttle-lever connection C in relation to their operating-cam with great precision and nicety.

In Figs. 6 to 17, inclusive, I have shown slight modifications in the mode of constructing the compound pivoting bearing D. In Figs. 6 and 7 the shafts D' and D² are shown provided with conical recesses in their ends, adapted to receive the ends of correspondingly-formed bearing-screws. In Figs. 8 and 9 a central screw-pin is shown passing centrally through the shaft D' for the purpose of holding the same in position, while in Figs. 10 and 11 the shaft D' is provided with an internal shaft formed with conical recesses at each end adapted to receive the conical ends of correspondingly-formed pivoting pieces, as shown. In Figs. 12 and 13 I have shown the shaft D² provided with an internal central shaft in which the conical recesses are formed for the reception of the ends of the centering-screws E E. In Figs. 14 and 15 I have shown the shaft D² provided with a central shaft provided at one end with a conical bearing-point adapted to be received in a suitable bearing in the casting A, while its opposite end is adapted to be held in position by a centering-screw E. Figs. 16 and 17 show a similar mode of supporting the shaft D' in position.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

5 The combination, with a shuttle-lever connection, of a compound bearing-piece, D, formed with a shaft, D', capable of being centered in a sewing-machine frame, and a shaft, D², formed at right angles to the shaft D', and

centered in the shuttle-lever connection C, substantially as and for the purpose described. 10

In witness whereof I have hereunto set my hand this 7th day of December, A. D. 1882.

JAMES TRIPP.

Witnesses:

MAX BAYERSDORFER,
WM. E. RICHARDS.