

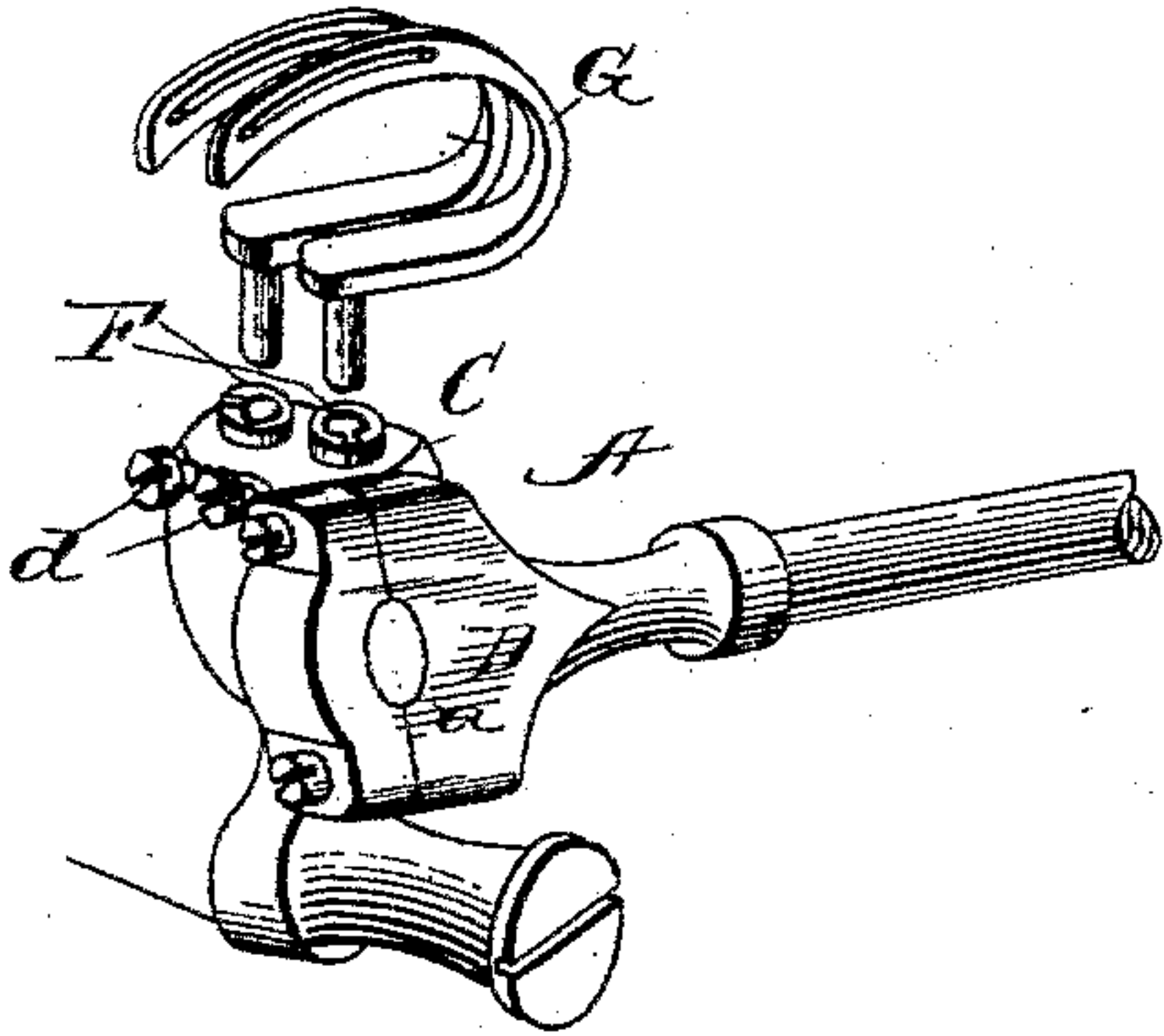
Model.)

W. T. HART.  
SEWING MACHINE.

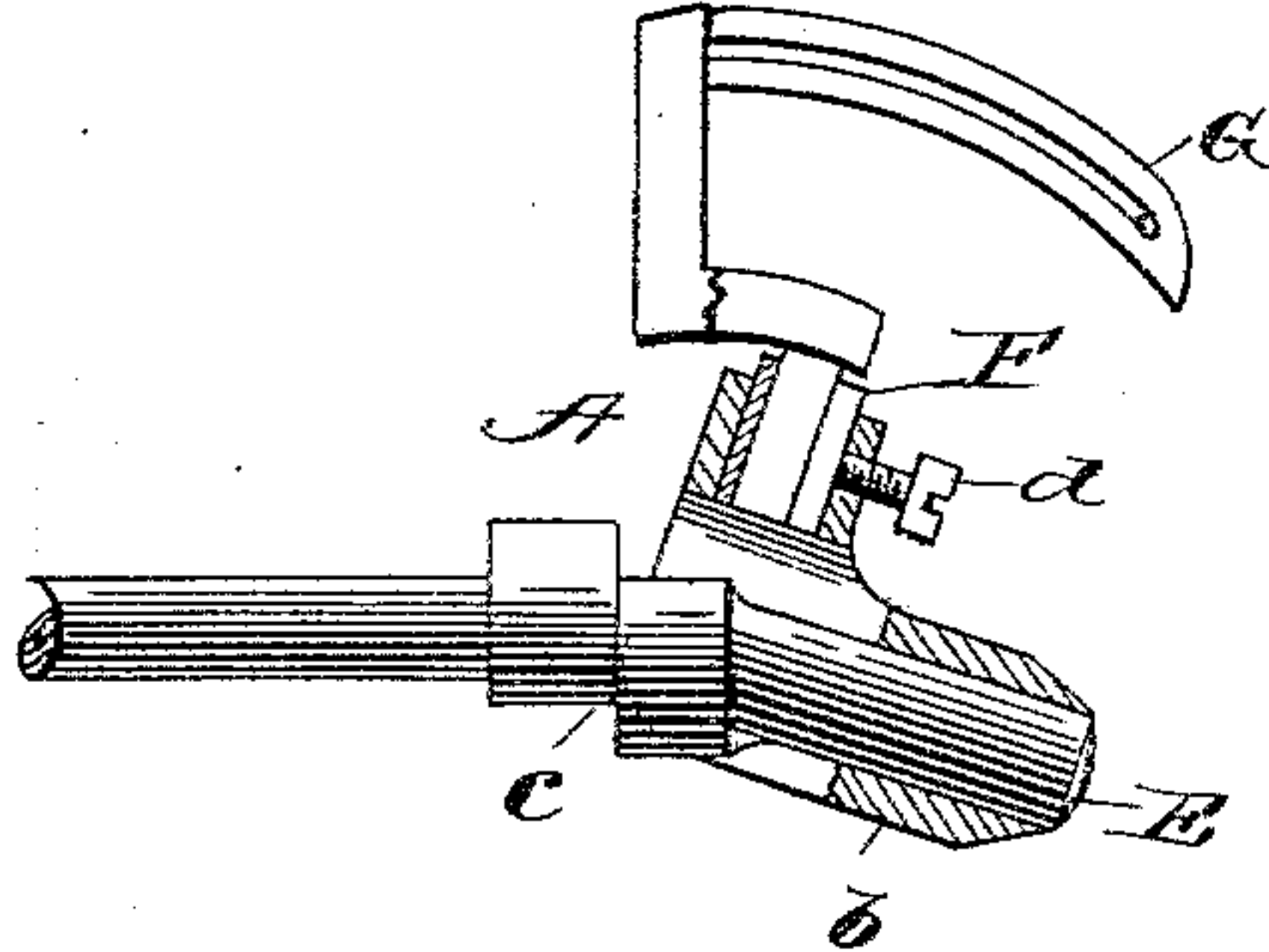
No. 597,610.

Patented Jan. 18, 1898.

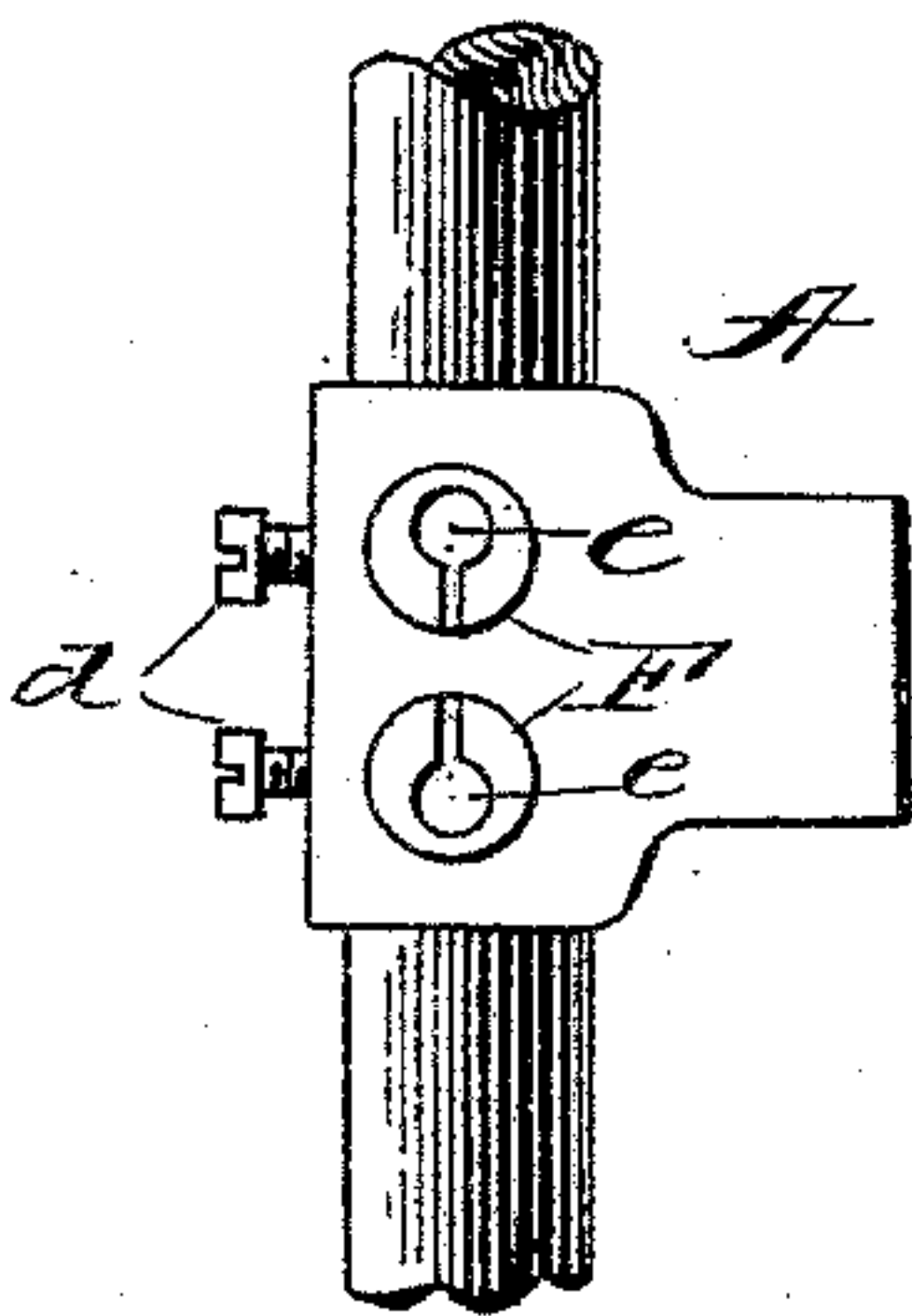
*Fig. 1.*



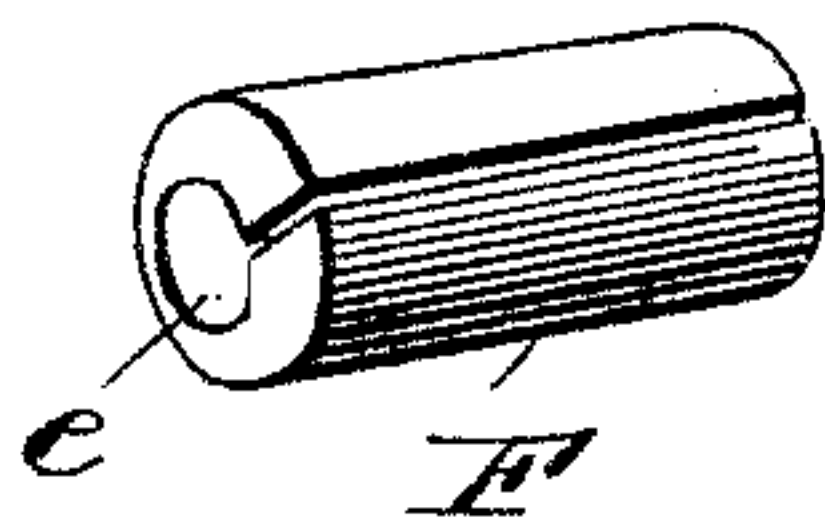
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:  
*J. M. Fowler Jr.*  
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# UNITED STATES PATENT OFFICE.

WILLIAM T. HART, OF KEENE, NEW HAMPSHIRE, ASSIGNOR TO THE UNION  
SPECIAL SEWING MACHINE COMPANY, OF CHICAGO, ILLINOIS.

## SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 597,610, dated January 18, 1898.

Application filed August 6, 1896. Serial No. 601,855. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM T. HART, a citizen of the United States, residing at Keene, in the county of Cheshire, State of New Hampshire, have invented certain new and useful Improvements in Sewing-Machines, of which the following is a description, reference being had to the accompanying drawings and to the letters of reference marked thereon.

My invention relates to an improvement in sewing-machines, and especially to a device or arrangement for adjusting the loopers on chain-stitch sewing-machines, whereby the time at which the looper catches the needle-thread loop may be varied or the amount of movement of said looper on one side or the other of the plane of the needles may be changed, or where a plurality of loopers are used their distance apart may be varied to accord with any change in position of the needles to vary the gage of the machine.

The object of the invention is to provide a comparatively simple and inexpensive device whereby the above results may be accomplished; and the invention consists in the matters hereinafter described, and referred to in the appended claim.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a detail view of the looper rocker and support of the well-known Union Special machine, showing my invention applied thereto. Fig. 2 is a similar view showing the invention applied to another type of chain-stitch machine. Fig. 3 is a similar view showing it applied to still another type of machine, and Fig. 4 is a detail view of the socketed holder.

In the drawings, and referring especially to Fig. 1, A represents as a whole the looper support or carrier, which is substantially the same as shown in Patent No. 299,568 and comprises a looper-supporting head C, journaled at its lower end on a stud actuated by a pitman D, having a head *a*, having a ball-joint connection with the part C.

In Fig. 2 the looper support or carrier A is

supported on trunnions which slide and rock in fixed bearings on the machine-frame and has its movements imparted to it by a bent pin E, which is included between flanges *b* on the looper-carrier, and there is also provided an eccentric *c*, working in a yoke on the carrier, which gives the sliding movement to the latter.

In Fig. 3 the looper support or carrier A is somewhat similar in shape to that shown in Fig. 2.

In Fig. 1 the looper-supporting head and in Figs. 2 and 3 the support or carrier proper is provided with openings within which are held by set-screws *d* split sleeves or tubes F, having the openings *e* therein arranged eccentrically of the central axis thereof, and in these openings the shanks of the loopers G are placed and clamped, after being adjusted to proper position, by the set-screws *d*, which compress the sides of the split tube around the shank of the looper. It will be seen by this construction that by loosening the set-screw *d* and turning the socketed cylindrical holders F so that the sockets are at the closest points to each other the loopers may be arranged very closely together and applied to a narrow-gage machine. If turned diametrically opposite, they will be adapted to a very wide gage machine. Furthermore, by shifting the positions of these socketed holders the distance of the point of the looper from the plane of the needle may be varied either forwardly or backwardly or laterally, thereby changing the time at which the looper catches the needle-thread or varying the amount of movement of the looper laterally on one side or the other of the plane of the needle.

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

A looper mechanism for sewing-machines comprising a carrier or support provided with a plurality of sockets, a plurality of split socket-pieces adapted to the sockets of the carrier or support, said socket-pieces being eccentrically bored for the reception of the

shanks of the loopers, and means for adjust-  
ably securing the socket-pieces within the car-  
rier or support and the shanks of the loopers  
within the socket-pieces, whereby the loopers  
5 may be adjusted relative to each other and  
also relative to the needle; substantially as  
described.

In testimony whereof I affix my signature  
in presence of two witnesses.

WILLIAM T. HART.

Witnesses:

DON H. WOODWARD,  
L. WELLINGTON.