C. PEDERSEN.

TENSION DEVICE FOR SEWING MACHINES.

APPLICATION FILED JULY 19, 1909.

961,893. Patented June 21, 1910.

FIG. 1.

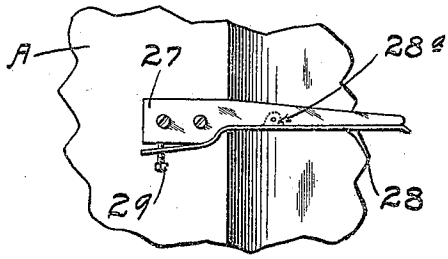
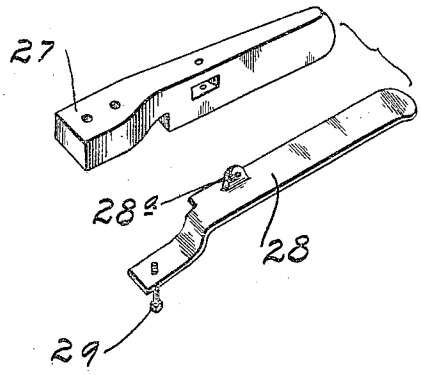


FIG. 2.



WITNESSES

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INVENTOR

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BY

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UNITED STATES PATENT OFFICE.

CHRISTIAN PEDERSEN, OF SKÖRRING PR. GALTEN, DENMARK, ASSIGNOR TO LANDIS MACHINE COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

TENSION DEVICE FOR SEWING-MACHINES.

961,893. Specification of Letters Patent. **Patented June 21, 1910.**

Original application filed April 23, 1909, Serial No. 491,667. Divided and this application filed July 19, 1909. Serial No. 508,448.

To all whom it may concern:

Be it known that I, CHRISTIAN PEDERSEN, a citizen of the United States, residing at Skörring pr. Galten, Jylland, Denmark, have invented a certain new and useful Improvement in Tension Devices for Sewing-Machines, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view of my improved tension device. Fig. 2 is a detail view of the parts separated.

This invention relates to a new and useful improvement in tension devices for sewing machines of the class known as the Campbell leather sewing machine, such as illustrated in an application filed by me April 23d, 1909, Serial No. 491,667, of which application this is a division.

The object of my present invention is to construct a tension device which consists essentially of two pieces, one of which is an arm designed to be secured to the frame of the sewing machine, and the other of which is a spring member pivotally mounted upon the arm, being provided with an adjusting screw whereby the tension of the free end of said yielding arm can be regulated.

In the drawings, A indicates the framing of the machine.

27 is an arm secured by suitable fastening devices, such as screws, to the end of the overhanging casting or arm of the machine.

28 is a flat spring member having a lug 28^a projecting from one face thereof and preferably formed integral therewith. This lug fits in a recess in the arm 27, and is pivotally held in position by means of a pin passing through an opening therein in a wellknown manner.

29 is an adjusting screw threaded in one end of the yielding tension member 28. By means of this screw the free ends of the tension member may be caused to exert a greater or less pressure upon the thread according to the desires of the operator. The upper or free ends of arms 27 and 28 are preferably flared or beveled outwardly so as to provide an easy entrance in introducing the thread between the members.

It will be observed in connection with the above construction that the flat spring member 28 is in the form of a lever of the first order, fulcrumed at the center, and by adjusting the screw 29 variable pressures may be exerted upon the thread through the free end of the flat spring member 28.

Having thus described my invention, what I claim is:

1. In a tension device for sewing machines, a rigid arm having means for securing it in position, a flat spring tension member having means located at its center for pivotally connecting it to said rigid arm, and an adjusting screw threaded through one end of said flat spring tension member and bearing against the rigid member to regulate the pressure of the free end of said tension member against the rigid arm.

2. In a machine of the class described, a wax thread tension device comprising a pair of members, one of which is resilient and hinged to the other at a point adjacent its center, and a tension adjusting screw carried by said resilient member and bearing against the opposite member.

3. In a machine of the class described, a tension device comprising a rigid member, a resilient member, the main body portion of which lies flat upon the rigid member, said resilient member and rigid member being hinged to one another at a central point, and a tension adjusting screw carried by one end of said resilient member and bearing against the rigid member.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 30th day of June 1909.

CHRISTIAN PEDERSEN.

Witnesses:
AXEL PERMIN,
OTTO SCHIÓTT.