

(No Model.)

C. WEICHELT.
CLOTH CLAMP FOR TEXTILE MACHINERY.

No. 573,065.

Patented Dec. 15, 1896.

Fig. 3.

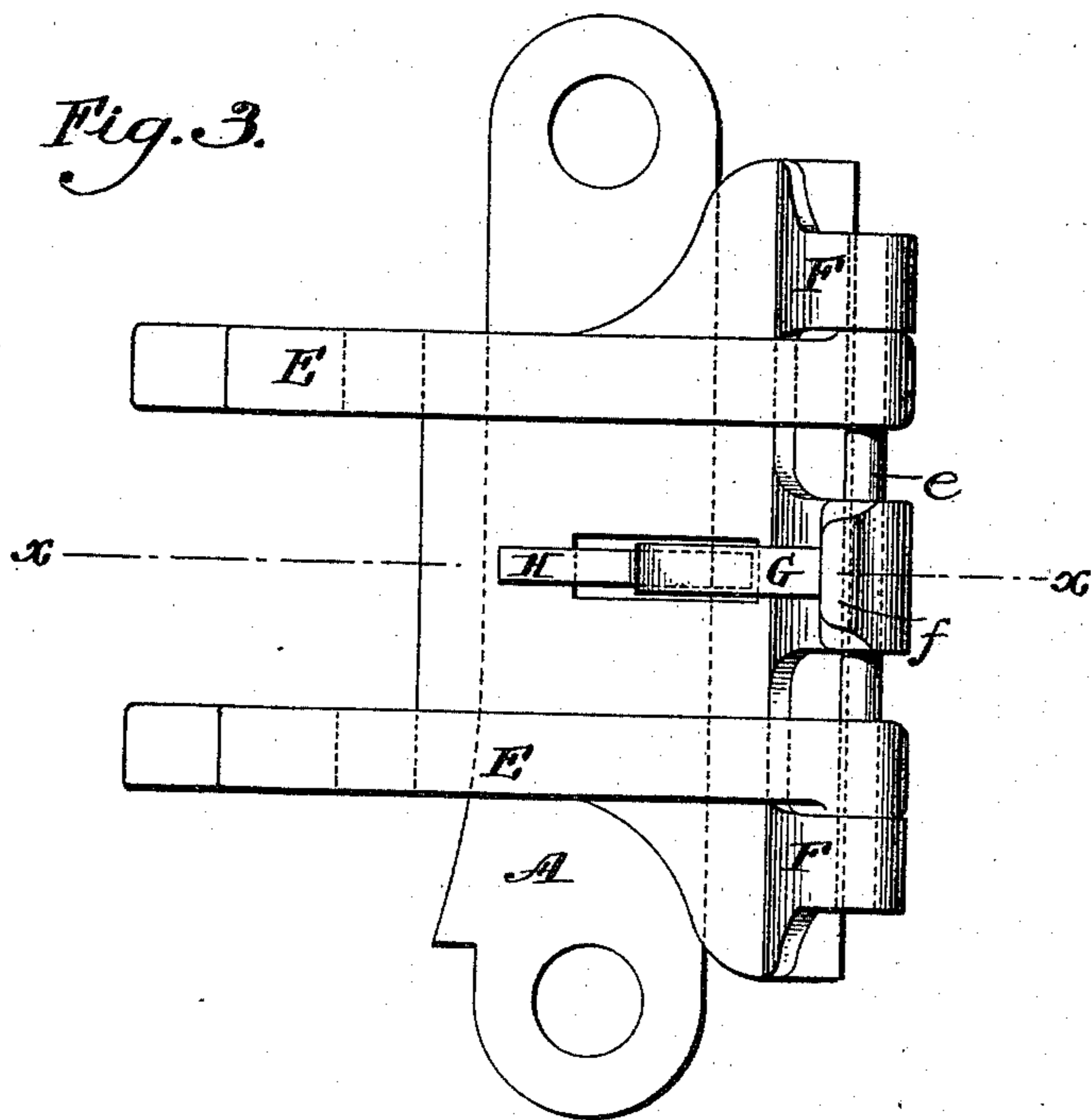


Fig. 1.

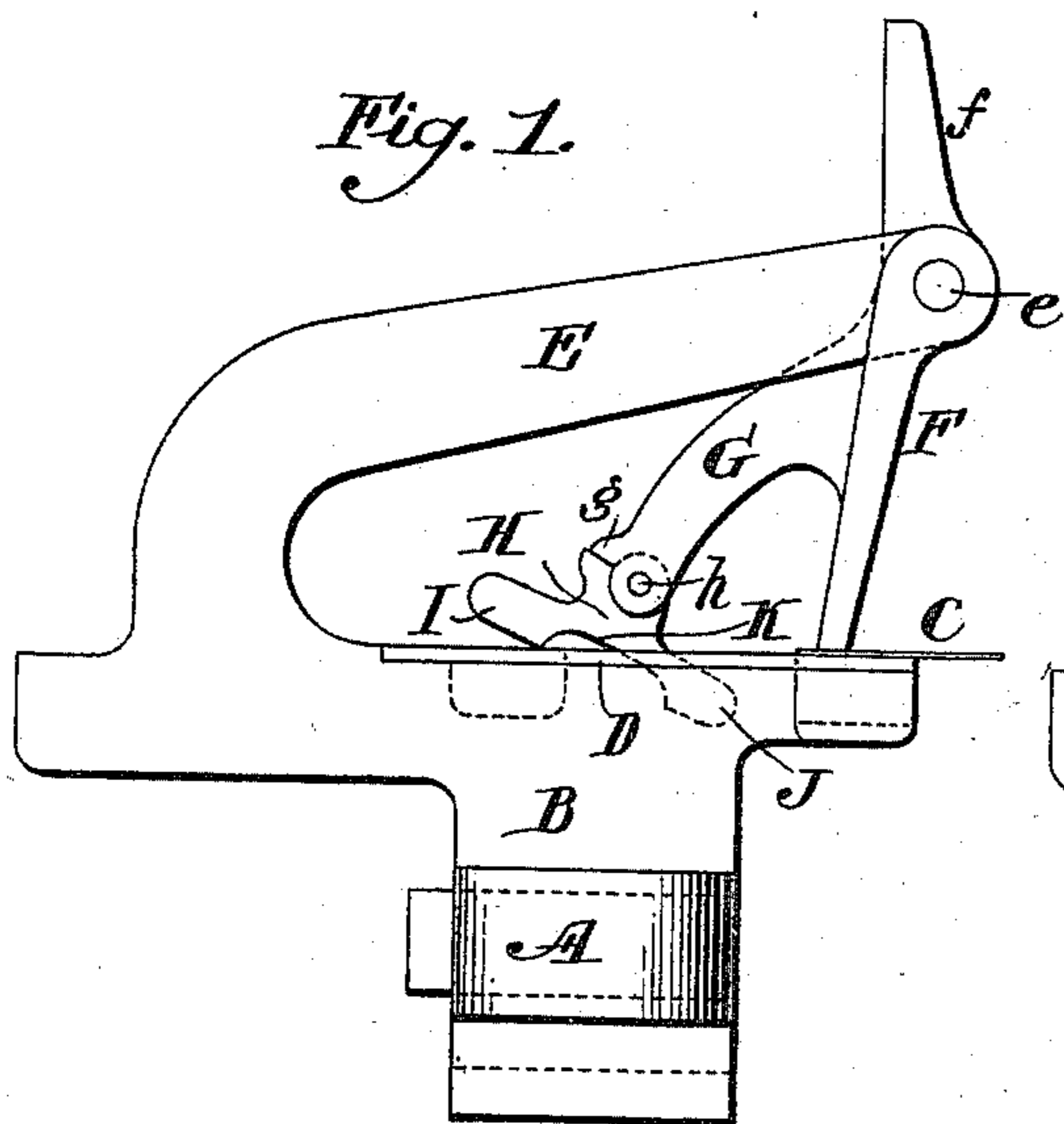
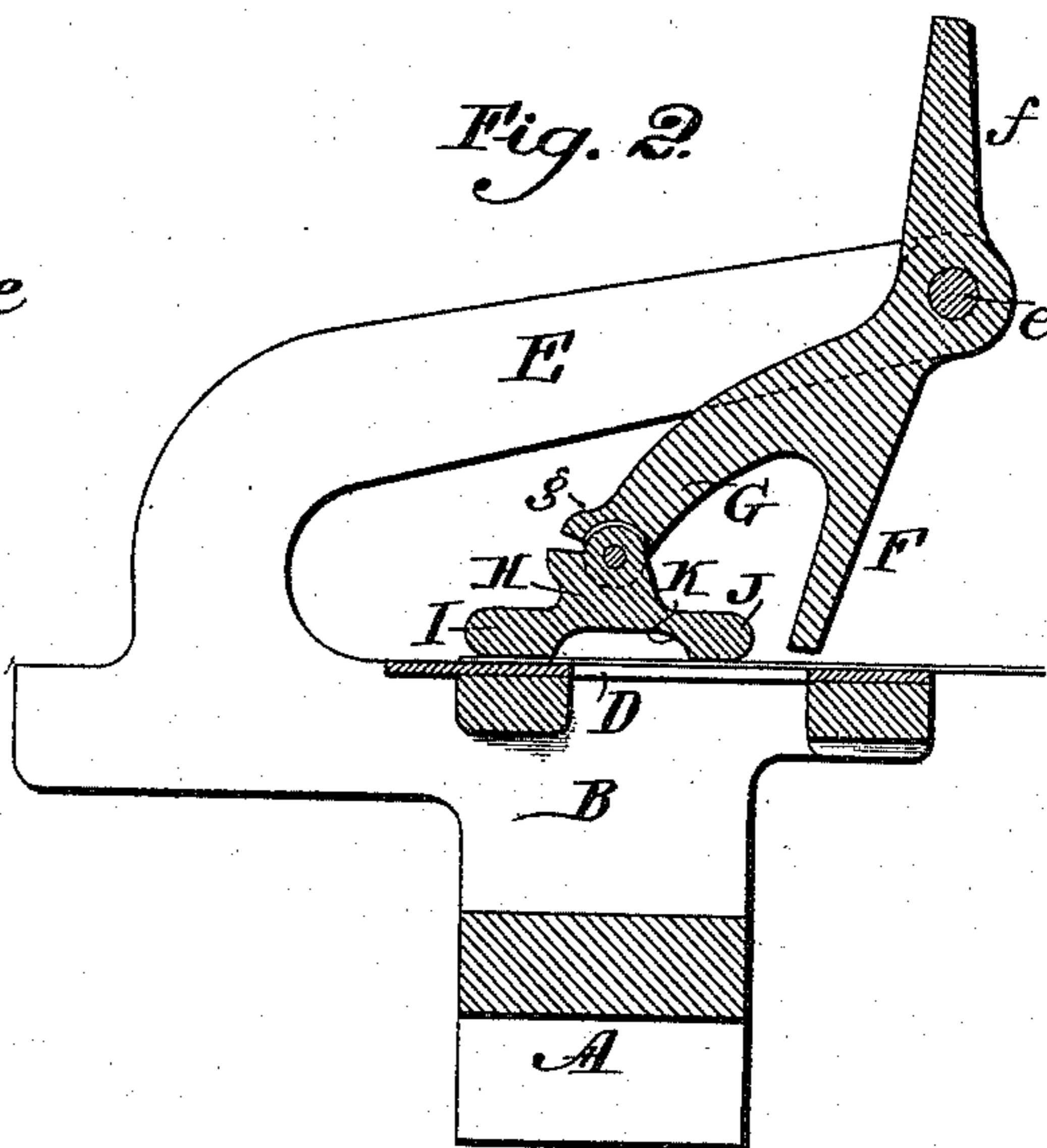


Fig. 2.



Witnesses.

Henry Denny
R. M. Kelly,

Inventor.

Chas. Weichelt
[Signature]
Attorney.

UNITED STATES PATENT OFFICE.

CHARLES WEICHELT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
THE H. W. BUTTERWORTH & SONS COMPANY, OF PENNSYLVANIA.

CLOTH-CLAMP FOR TEXTILE MACHINERY.

SPECIFICATION forming part of Letters Patent No. 573,065, dated December 15, 1896.

Application filed October 8, 1896. Serial No. 608,252. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WEICHELT, of the city and county of Philadelphia and State of Pennsylvania, have invented an Improvement in Cloth-Clamps for Textile Machinery, of which the following is a specification.

My invention has reference to cloth-clamps for textile machinery; and it consists of certain improvements which are fully set forth in the following specification and shown in the accompanying drawings, which form a part thereof.

My improvements comprehend certain constructions of clamps especially adapted to tentering-machines for holding the edge of the cloth while under manipulation.

The object of the clamp is to make it automatic to insure the gripping of the extreme edge of the cloth when the same is inserted into the clamp or the clamp moved upon the edge of the cloth.

In carrying out my invention I provide a rigid jaw with an overhanging part to which is pivoted a movable jaw. To the rear of the movable jaw is pivoted a controlling-finger, the same consisting of a portion extending to the rear and adapted to come into contact with the rigid jaw to constitute a fulcrum-point, and a forward part adapted to play freely through an aperture in the floor of the rigid jaw and rest upon the fabric when inserted in such a manner as to hold the movable jaw away from the fixed jaw.

In operation when the cloth is drawn from under the controlling-finger the same falls downward, permitting the movable jaw to grasp the extreme edge of the fabric while passing beneath it, and at the same time the weight of the controlling-finger assists in closing the movable jaw upon the fixed jaw. When the movable jaw is thrown up out of the way prior to the entrance of the cloth into the clamp, the controlling-finger is moved up with it, so as to be completely removed and thereby leave the space between the jaws perfectly clear and unobstructed.

My improved clamp is exceedingly simple, not liable to get out of order, and is cheap to construct. Furthermore, it secures the most advantageous results with a minimum weight.

Moreover, the leverages are such that the most delicate fabric will sustain the weight of all the parts in operation.

My improvements will be better understood by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of a cloth-clamp embodying my invention when in the act of clamping the cloth. Fig. 2 is a similar view before the cloth has been drawn from under the controlling-finger, and Fig. 3 is a plan view of my improved clamp.

A is a link or a chain of any suitable conveyer.

B is the fixed jaw and may be formed integral with the conveyer-link. In practice this jaw is made of iron and covered with a plate C of brass to avoid rust, which would be injurious to the fabric. The fixed jaw is provided with an overhanging structure E, to which is pivoted at *e* the movable jaw F, the gripping edge of which is movable to and from the plate C of the fixed jaw. The movable jaw is provided with an upward extension *f*, adapted to be operated by a suitable cam, as is customary. The rear portion of the movable jaw F is provided with an arm G, to the lower end of which is pivoted at *h* the freely-moving controlling-finger H. The controlling-finger consists of a small casting, inverted-T-shaped, and having two extensions relatively disposed upon each side of its pivot, one of which, I, extends rearwardly and the other of which, J, projects toward the movable jaw and is arranged to freely play through a slot D in the fixed jaw. The space between the parts I and J is recessed, as at K, so that the rear part I acts as a fulcrum upon the movable jaw, and the forward part J presents a flattened surface to act upon the fabric. The controlling-finger H is free to swing upon its pivot *h*, and may be provided with a stop-shoulder S to limit the backward movement, so as to prevent the part J catching upon the movable jaw when the parts are thrown downward.

When the clamp is thrown wide open, the movable jaw F, together with the controlling-finger, is lifted rearwardly and upwardly, leaving a clear space between the fixed jaw and the overhanging structure E, into which

the cloth passes. When the cloth is inserted, the movable jaw is allowed to fall, and as it approaches the cloth the extension I of the controlling-finger strikes the fixed jaw, while the forward extension J is received upon the cloth, as shown in Fig. 2. This action holds the movable jaw away from the cloth. As, however, the cloth is drawn from under the extension J this part of the controlling-finger is wholly liberated, and it falls through the slot D, permitting the clamping-jaw F to descend and assisting the jaw in this action by its weight. The cloth is in this manner gripped close to its selvage, as shown in Fig. 1. I do not confine myself to any form of carrier or conveyer for the clamp, nor do I limit myself to the details of construction, as the configuration or shape may be modified without departing from the principle of my invention.

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

1. In a cloth-clamp, the combination of a fixed jaw, with a movable jaw movable to or from the fixed jaw, and a controlling-finger hinged to the rear of the movable jaw provided with a rear fulcrum extension adapted to come in contact with the fixed jaw and a forward controlling extension adapted to be received and temporarily sustained by the cloth.

2. In a cloth-clamp, the combination of a fixed jaw, with a movable jaw movable to or

from the fixed jaw, and a controlling-finger hinged to the rear of the movable jaw provided with a rear fulcrum extension adapted to come in contact with the fixed jaw and a forward controlling extension adapted to be received and temporarily sustained by the cloth, and a stop to limit the backward swinging motion of the controlling-finger upon the movable jaw.

3. In a cloth-clamp, the combination of a fixed jaw having a recess or aperture in its face, a movable jaw pivoted to the fixed jaw so as to move to or from it and provided with a rear extension, and an inverted-T-shaped controlling-finger loosely connected to said rear extension and having its rear part adapted to come into contact with the fixed jaw and its forward part to play freely through the recess or aperture of said jaw.

4. In a cloth-clamp, the combination of a fixed jaw having an aperture or recess in its face, a pivoted jaw, and a controlling-finger loosely jointed to the rear of the pivoted jaw at a distance from its pivot and adapted to extend through the recess or aperture unless sustained by the cloth between the jaws.

In testimony of which invention I hereunto set my hand.

CHARLES WEICHELT.

Witnesses:

E. S. CHRISMAN,

GEO. E. POTTS.