

No. 621,304.

Patented Mar. 14, 1899.

G. JOSEPHY.

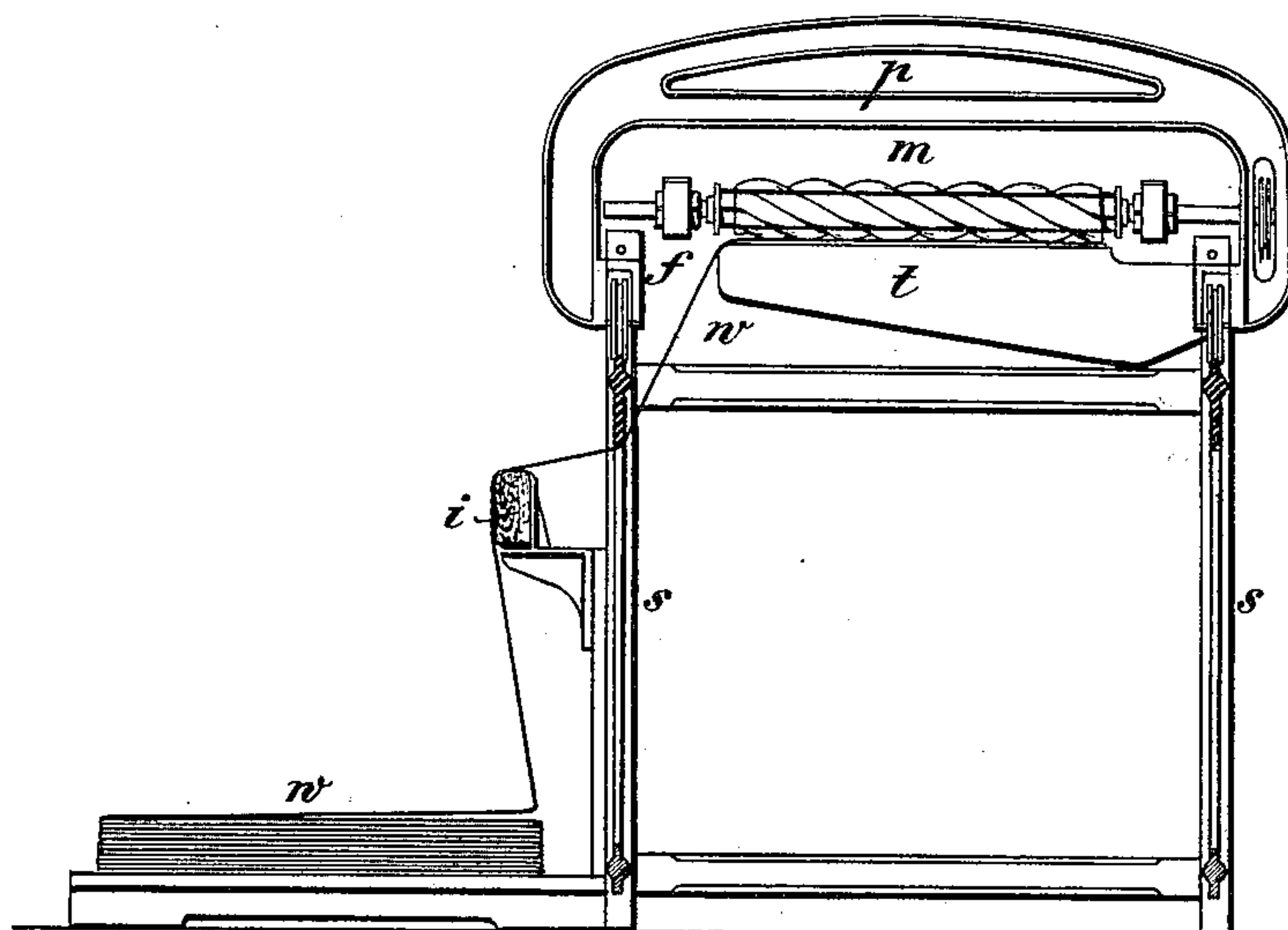
MACHINE FOR SHEARING MARGINS OF CLOTH.

(Application filed July 1, 1898.)

(No Model.)

2 Sheets—Sheet 1.

*Fig. 1.*



Witnesses:

*Alfred Talbot*  
*John F. Wright*

Inventor:  
*Gustav Josephy*  
by *Marcellus Bailey*  
Att'y.

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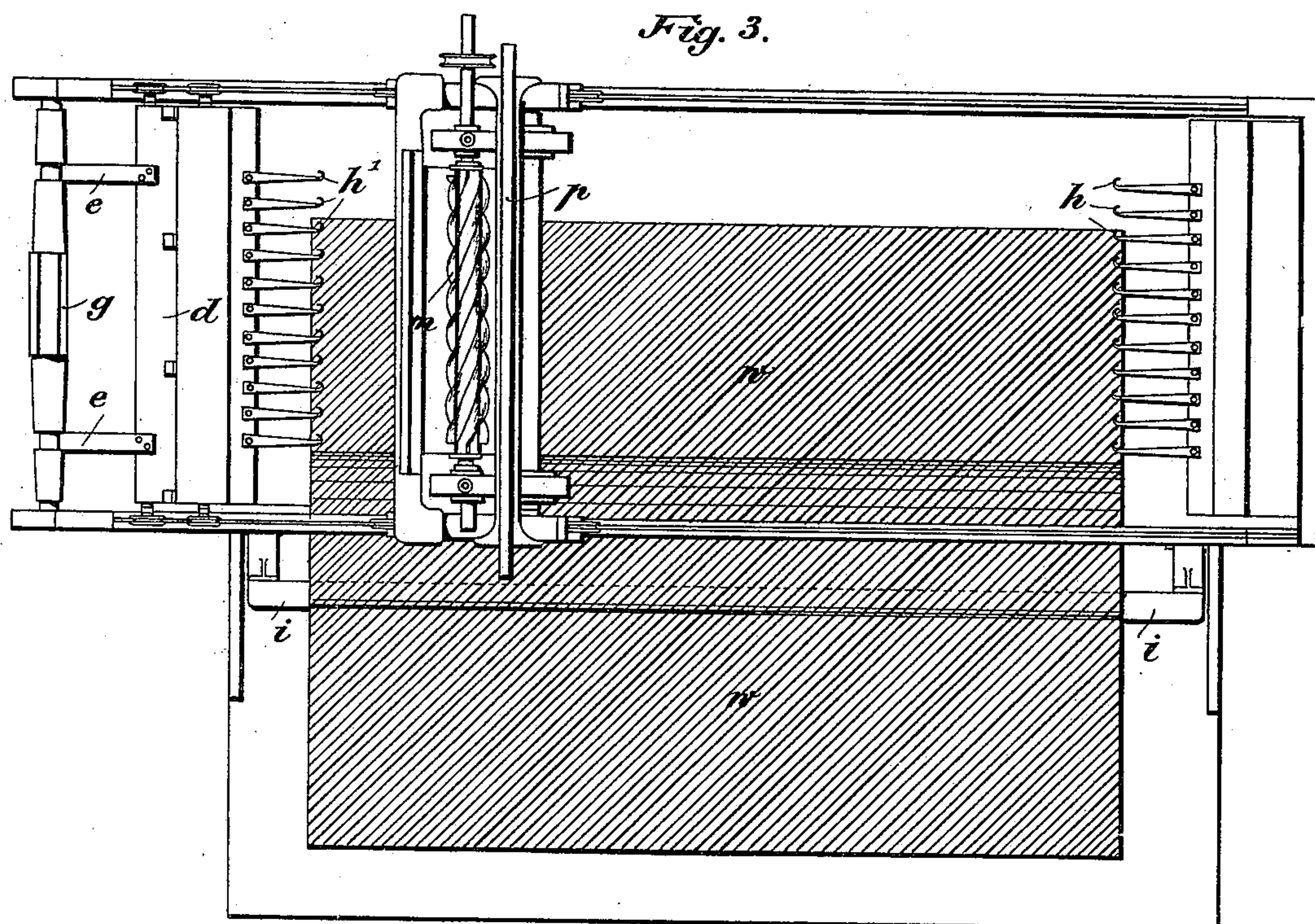
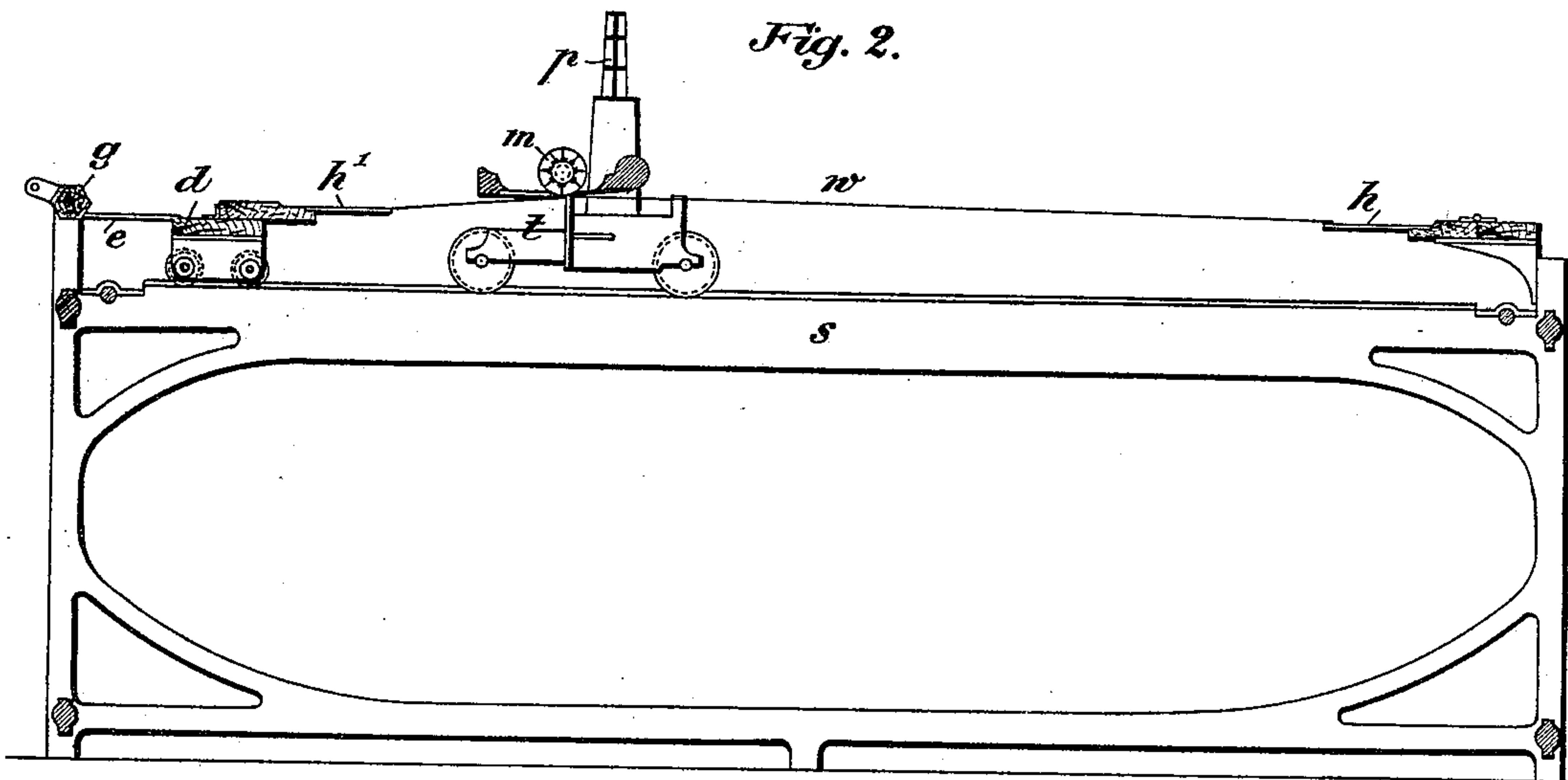
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MACHINE FOR SHEARING MARGINS OF CLOTH.

(Application filed July 1, 1898.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses:

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# UNITED STATES PATENT OFFICE.

GUSTAV JOSEPHY, OF BIELITZ, AUSTRIA-HUNGARY, ASSIGNOR TO G. JOSEPHY'S ERBEN, OF SAME PLACE.

## MACHINE FOR SHEARING MARGINS OF CLOTH.

SPECIFICATION forming part of Letters Patent No. 621,304, dated March 14, 1899.

Application filed July 1, 1898. Serial No. 684,942. (No model.)

*To all whom it may concern:*

Be it known that I, GUSTAV JOSEPHY, a subject of the Emperor of Austria-Hungary, residing at Bielitz, in the Empire of Austria-Hungary, have invented a new and useful Machine for Shearing or Trimming the Margins of Cloth or Fabric, (for which patents have been granted in Germany, No. 101,659, dated April 27, 1898; in France, No. 278,182, dated May 23, 1898; in Belgium, No. 135,797, dated May 23, 1898; in England, No. 12,063, dated May 27, 1898; and in Austria, dated October 7, 1898, and application for Russian patent filed June 7, 1898, for which no patent has been granted,) of which the following is a specification.

My invention relates to machines for shearing or trimming woven fabrics, such as cloth, in which a spirally-wound cutter (cutter-roller) operates in conjunction with an under-cutter; and the object of my invention is to provide means especially for shearing the margins of cloth left at either end of the piece previously treated on the longitudinal shearing-machines now in use.

The longitudinal shearing-machines hitherto generally employed in removing upright-standing hairs and other projecting parts of cloths or fabrics and in smoothing the upper face of textile fabrics are attended with the disadvantage that they leave at either end of the piece of cloth a strip or margin which has to be sheared separately, as the present shearing or cutting mechanism cannot be brought sufficiently close to the seam. In order to shear or trim these ends, Levis's or Davis's transverse shearing-machines are resorted to in practice. These machines, however, involve the necessity of winding the goods first upon one roller, so as to trim one of the ends, and then from that roller onto a second roller, whereon the other end or margin is trimmed, and when the marginal shearing is thus completed the material has to be unwound from the second roller, so that this process involves three successive operations—viz., the winding of the cloth on one roller, its transfer to another roller, and its unwinding from the latter. The performance of these operations requires two attendants and entails an expenditure of time quite out of proportion to the amount of useful work performed, con-

sidering especially that the width of the ends to be sheared or trimmed scarcely ever exceeds two hundred or three hundred millimeters. Besides, the shearing-machines used for the purpose being generally constructed for a "cut" of at least 1.160 meters wide take up a large space, the shearing table or bench in the said Levis's or Davis's machines, together with the shearing device or cutter of the cross-shearing machines heretofore known, being supported by a spectacle-shaped frame or structure forming the connection between the two side frames or cheeks of the machine, while the material is made to pass under the cutting or shearing device through the spaces left free between the said cheeks. Now according to my invention the goods as they come from the longitudinal shearing-machine in uncovered or open layers are conducted into a machine so constructed as to directly shear or trim the end of the cloth as it is supplied from the longitudinal or main shearing-machine. In the improved machine the cutting or shearing device and the bench or table, which is left free on one side, are arranged in such a manner that the material to be trimmed enters the mechanism laterally and is thereby protected from damage. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a cross-section, Fig. 2 a plan, and Fig. 3 a longitudinal section, of an example of a marginal shearing-machine constructed in accordance with this invention.

The shearing device proper—namely, the cutter-roller *m* and its undercutter *x*—are supported in a sliding yoke or stirrup-shaped frame *p*. The shearing table or bench *t* is also supported by the said frame *p*, but is connected thereto at one end only, having an open space *f* at its opposite end.

The sliding frame supporting the shearing-gear is adapted to travel on the suitably-shaped upper edges of the sides or cheeks *s s* of the machine-frame, which frame is fitted at one end with a series of stationary nippers, hooks *h*, or equivalent means for firmly holding the cloth *w*, while at its other end similar devices *h'* are arranged upon a carriage *d*. This carriage may be connected to a stretching-roller *g* by means of bands or



chains *e* or be made controllable from some other equivalent device, so as to enable it to be adjusted at any required distance from the other end of the machine, in accordance with the width of the cloth to be operated on, and thus to insure the proper stretching of the said cloth. The cloth folded or piled up next to the machine from the rest is drawn upon the table *t* over the beam *i* and under the cheek of the side frame *s*, whereupon it is fixed in position by the devices *h h'*, and the shearing-gear then comes into operation.

Inasmuch as the machine itself is unencumbered by any appliances requiring much room, it may be built as narrow as may be desirable—say from two hundred to three hundred millimeters downward.

The practical advantages afforded by this new machine by simplifying the work and thereby reducing its cost are obvious, since the tedious operations of winding and unwinding the cloth backward and forward, which have been unavoidable hitherto, are by the present contrivance rendered unnecessary, so that an equal or greater output can with the new machine be secured at the cost of less labor, both the number of hands employed and the space occupied by the apparatus being greatly reduced.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The combination of a traveling yoke, a revolving cutter, an undercutter, a bench or table connected at one end only to the said traveling yoke, a guiding-beam, and means for holding the cloth, substantially as and for the purposes hereinbefore set forth.

2. The combination of a traveling yoke, a revolving cutter, an undercutter, a bench or table connected at one end only to the traveling yoke, and means for holding the cloth, substantially as and for the purposes hereinbefore set forth.

3. The combination of a revolving cutter, a table or bench, means for carrying said revolving cutter and table or bench, said table or bench being connected at one end only to such carrying means, and means for holding the cloth, substantially as and for the purposes hereinbefore set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GUSTAV JOSEPHY.

Witnesses:

HENRY C. CARPENTER,  
CHAS. E. CARPENTER.