E. Blattner,

Making Whips,

No. 17,617, Patented June 23, 1857

Fig. 1.

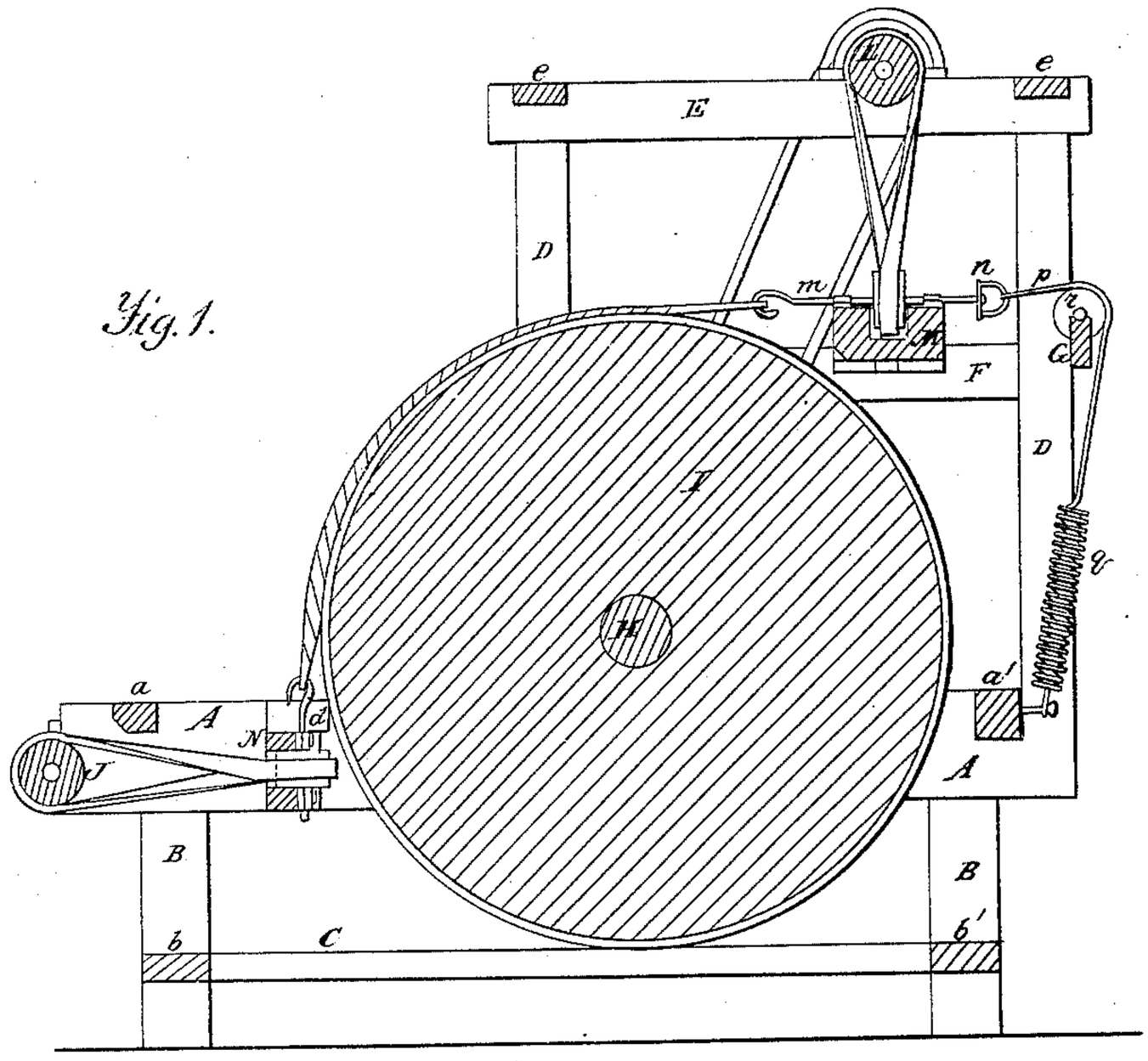
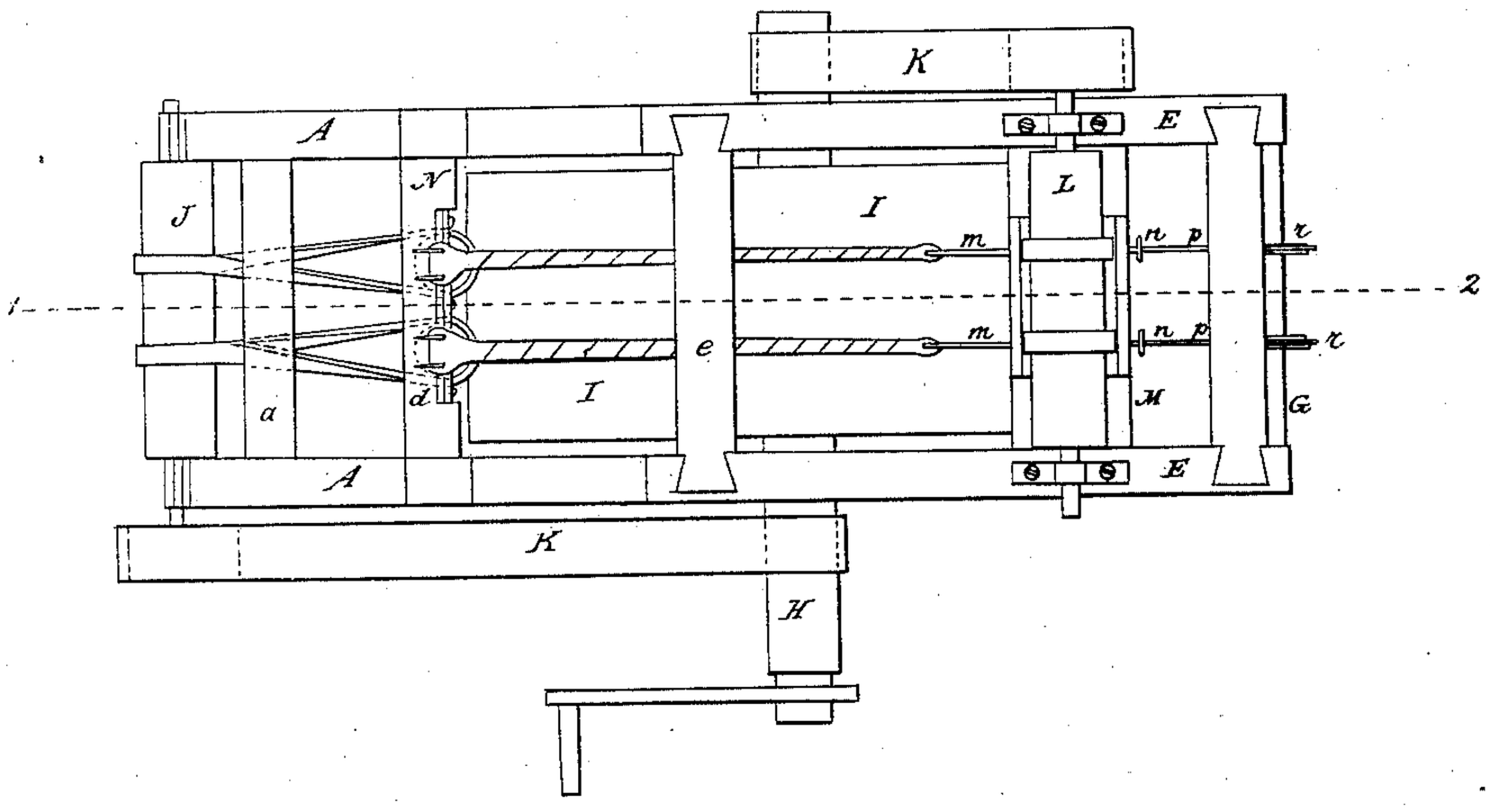


Fig. 2.



UNITED STATES PATENT OFFICE.

EUGENE BLATTNER, OF PHILADELPHIA, PENNSYLVANIA.

MACHINE FOR POLISHING RAWHIDE WHIPS.

Specification of Letters Patent No. 17,617, dated June 23, 1857.

To all whom it may concern:

Be it known that I, EUGENE BLATTNER, of the city of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Machinery for Smoothing Cowhide Whips; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to improvements in machinery for grinding off the spiral ridges which remain on the strips of hide which have been twisted and dried preparatory to being formed into whips, and my improvements consist in the employment, in connection with the usual grinding pulley, of two sets of spindles to which I attach the opposite ends of a corresponding number of the twisted strips. The spindles are so situated with respect to the grinding pulley that the strips or thongs are bent over and pressed to a portion of its periphery. A rotary motion is imparted to the pulley and spindles simultaneously, and consequently to the twisted strips, so that not only are the spiral ridges effectually removed from the said strips, but that the latter may be also reduced to a round, smooth, and regular tapering form.

In order to enable others skilled in the art to make and use my invention I will now proceed to describe its construction and operation.

On reference to the drawing which forms a part of this specification, Figure 1 is a sectional elevation of my machine for smoothing cowhide whips; Fig. 2, a plan view of the same.

A and A′ are two beams connected together by the cross-pieces *a* and *a′* and resting on legs B, B, B, B, which are stayed by the longitudinal pieces C, C, and cross pieces *b*, *b′*. On the beams A and A′ are secured uprights D connected together at the top by the longitudinal pieces E, E, and cross-bars *e*, *e;* to the uprights D are also connected longitudinal pieces F and a cross-piece G.

The above forms the framework of the machine.

Turning in suitable boxes attached to the frame is the main shaft H, to which is secured the pulley I, the periphery of the latter being covered with sand or emery or other suitable grinding material.

A roller J is caused to turn in boxes attached to one end of the framework by means of a strap from the spindle H, and by means of another strap K, from the same spindle a second roller L is caused to turn in boxes secured to the opposite longitudinal pieces E. To the bars F are attached the ends of the transverse bar M, on the top of which turn any convenient number of spindles *m*, which are furnished at one end with hooks and at the opposite ends with swivels *n*. To the latter are connected bands *p*, which pass over pulleys *r*, turning in eyes on the cross-bar G. To the bands are attached spiral springs *q*, and the ends of the latter to the cross-bar *a′*.

Between the beams A and A′ is secured a frame N, in which turn the hooked spindles *d*, the latter being directly in a line with and corresponding in number to the hooked spindles *m*. Motion is communicated to the upper spindles by straps from the roller L and to the lower spindles by straps from the roller J.

In manufacturing hide whips taper strips are twisted in a frame and left to dry, after which they retain their twisted form. The spiral ridges however remaining on their surface must be removed. This has been hitherto effected by the operator applying each twisted strip separately to a grinding pulley, at the same time turning the strip around with his fingers. This tedious process is avoided by the employment of the apparatus above described.

The dry twisted thongs are connected at one end to the hooks of the spindles *d* and at the opposite end to the hooks of the spindles *m*, the spiral springs *q*, causing the thongs to be bent over and pressed against a portion of the periphery of the roller I. A rotary motion is now imparted to the shaft H and roller I, and simultaneously to the hooked spindles *d* and *m*, thus causing the twisted strips to revolve as they are being operated upon by the grinding surface of the roller, thereby not only removing the spiral ridges from the strips, but imparting to the latter a uniform roundness, smoothness, and regular tapering form.

I do not desire to confine myself to the

precise means herein described of driving the hooked spindles, as that may be accomplished in a variety of ways, but

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

The grinding pulley I and spindles *d* and *m*, when a simultaneous rotary motion is imparted to the same and when they are arranged for joint operation, substantially in the manner herein set forth and for the purpose specified.

In testimony whereof, I have signed my name to this specification before two subscribing witnesses.

EUGENE BLATTNER.

Witnesses:

HENRY HOWSON,

WILLIAM E. WALTON.