(No Model.)

C. M. CLANCY.

MACHINE FOR POINTING HOOPS.

No. 247,242. Patented Sept. 20, 1881.

Fig. 1.

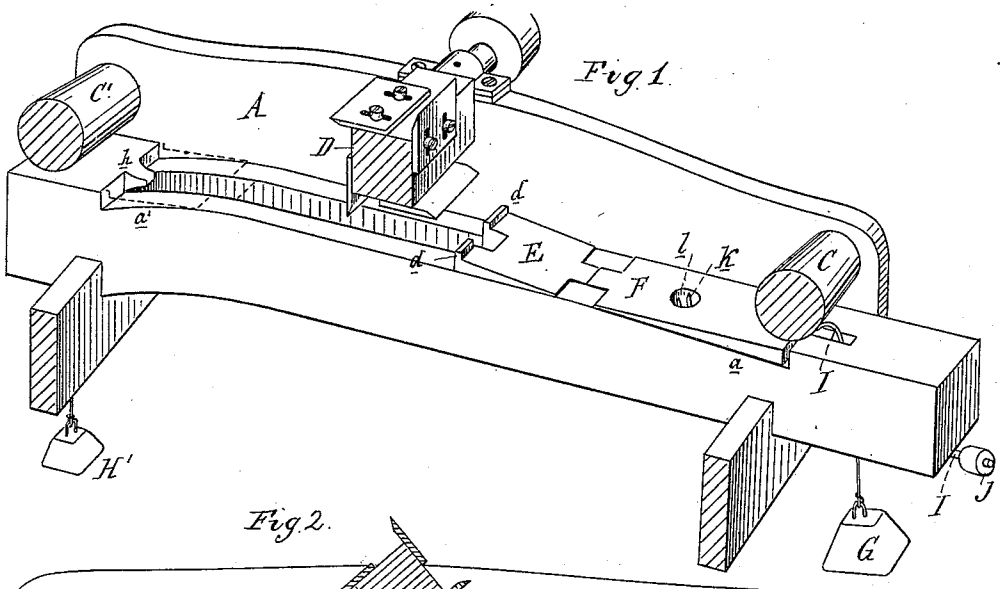


Fig. 2.

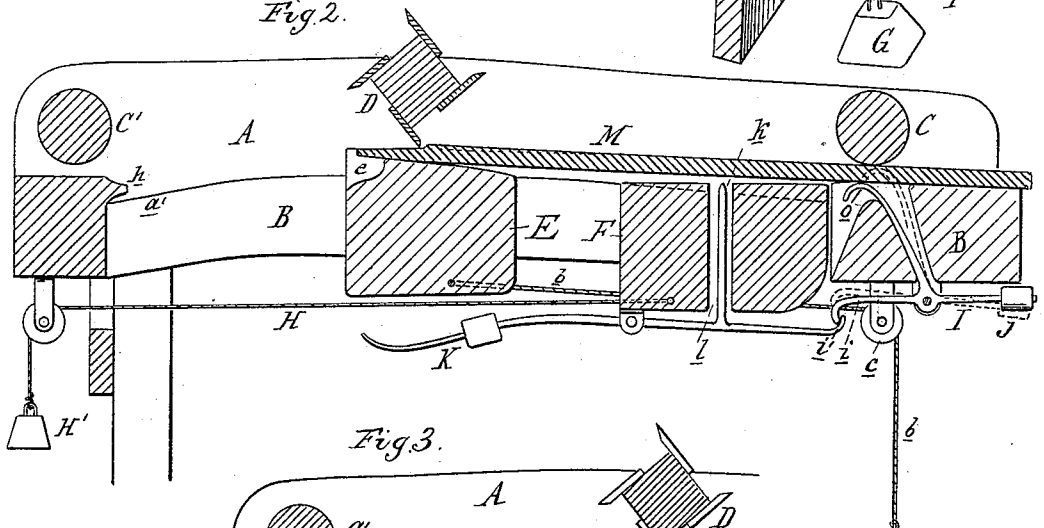
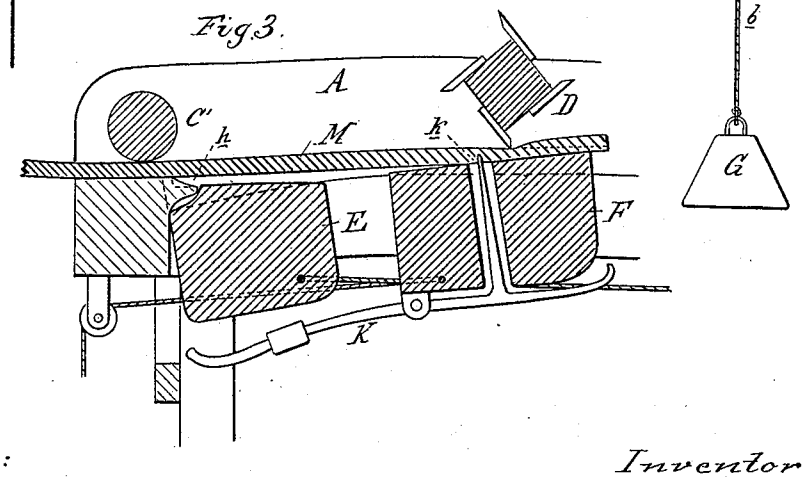


Fig. 3.



Attest:
A. Bartpel.
N. S. Magee

Inventor:
Crowell M. Clancy
by Thos. A. Spragues
Atty

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CROWELL M. CLANCY, OF WALLACEBURG, ONTARIO, CANADA.

MACHINE FOR POINTING HOOPS.

SPECIFICATION forming part of Letters Patent No. 247,242, dated September 20, 1881.

Application filed February 17, 1881. (No model.)

To all whom it may concern:

Be it known that I, CROWELL M. CLANCY, of Wallaceburg, in the county of Kent and Province of Ontario, Dominion of Canada, have invented an Improvement in Machines for Pointing Hoops, of which the following is a specification.

The nature of this invention relates to certain new and useful improvements in the construction of that class of machines employed for dressing and chamfering the ends of hoops; and the invention consists in the peculiar construction and arrangement of certain sliding wedge-blocks, which, in connection with a rotating cutter, chamfer or "lap" the ends of the hoop in the passage through the machine, irrespective of the length of the hoop, all as more fully hereinafter set forth.

Figure 1 is a sectional perspective. Fig. 2 is a longitudinal section showing the position of parts as the front end of the hoop passes to the cutter, and Fig. 3 is a similar view as the rear end of the hoop is being operated upon by the cutter.

In the accompanying drawings, which form a part of this specification, A represents a suitable table or frame, in which is arranged the slotted or double guide or way B, and transversely across the top of the table are properly journaled the presser-rolls C C′ and cutter-head D, the latter of which may be rotated from any convenient power. Near the ends of the guide B the upper edges are curved or inclined, as at *a a′*, for the purposes hereinafter given.

E and F represent two T-shaped sliding wedge-blocks, the heads being wedge-shaped in longitudinal section. To the lower portion of the block E is secured a proper cable, *b*, which leads to the front of the machine and passes over a grooved pulley, *c*, and has secured to its end a weight, G. This block E is provided with two upwardly-projecting studs, *d*, and a recess, *e*, which latter, when the block has traveled to the rear of the machine, embraces the stud *h*, which projects inwardly between the two members of the guide, as shown.

The wedge-block F is provided with a weight and cable, H and H′, arranged to exert its force in an opposite direction to the weight G, which latter should be the heavier of the two.

I represents a Y-shaped lever, pivotally secured in the front end of the guide B, one arm of such lever being provided with a weight, J. The arm *i* of this lever is hooked, as shown, to engage with the hooked end *i′* of the weighted lever K, pivotally secured to the bottom of the block F. To this lever K is secured a spur, *k*, which projects up through an opening, *l*, in said block F.

In practice, the parts being constructed and arranged substantially as described, the end of a hoop, M, is fed to the machine under the front roller, C, which depresses arm *o* of the lever I, causing the arm *i* thereof to engage with the lever K, and thus lock the block F in place. In the further travel of the hoop the advancing end strikes against the studs *d* of the wedge E and pushes the same ahead of it, necessarily bringing the end of the hoop in contact with the cutter-head D, which in its rotation chamfers or thins the end of the hoop from the point back till the thin edge of the block is flush, or nearly so, with the upper edge of the guide. In the further progress of the hoop the cutter dresses off the body of the same, and the block E slides down the incline *a′* at the rear of the machine, the end of the hoop sliding up on the stud *h* and out beneath the presser-roll C′. As the hoop still advances and the rear end passes from under the roll C the weight J exerts its force upon the lever I, so as to disengage the lever K, when the spur *k* is driven up into the hoop, thus dogging hoop upon the block F. The hoop, still advancing, carries with it, assisted by the weight H′, the block F, which, advancing to the cutter-head wedge-point first, causes the end of the hoop to be chamfered or thinned in its passage under the cutter-head, the hoop and block F passing on until the two blocks come together. As the hoop thence passes on, it bears against the studs *d* of the block E until the end of the hoop has passed over it, when the weight G draws both wedges back to their original position at the front of the machine.

It will be observed that the hoop is thinned off at each end, forming what is ordinarily termed the "lap" at one passage through the mill or machine, and that the material cut away must necessarily be only so much as the upper surfaces of the wedges project above the face

of the guide in their passage under the cutter, and the two curves *a a'* or inclines at each end of the machine are formed so that at the beginning and finishing of the operation their faces will be flush, or nearly so, with the edge of the guide.

It is evident that this arrangement of the guide and wedge-blocks may be multiplied, so that two or more hoops may be operated upon at the same time.

What I claim as my invention is—

1. In a machine for chamfering or thinning hoops, and in combination with a rotary head, a sliding carriage having an inclined upper surface, and traveling on a way or guide having a depressed end, substantially as and for the purpose set forth.

2. In a machine for chamfering or thinning hoops, and in combination with a rotary cutter-head, two sliding wedge-blocks or carriages, E F, traveling on a guide or way, B, having depressed ends *a a'*, substantially as and for the purpose specified.

3. In a machine for chamfering and thinning hoops, and in combination with a rotary cutter-head and a guide or way having a depressed end, the traveling carriage E, having an inclined upper surface and provided with an upwardly-projecting stud or studs, *d d*, at one end, substantially as and for the purpose described.

4. In a machine for chamfering or thinning hoops, provided with a way or guide having a depressed end, the traveling carriage E, having studs *d d* and a recess, *e*, in combination with the projecting stud *h* at the end of the guide, for the purpose of raising the ends of the hoop over the studs *d d* when the carriage reaches the end of the guide, substantially as described.

5. In a machine for chamfering or thinning hoops, and in combination with a cutter-head and a guide or way having a depressed end, the traveling wedge-block or carriage F, provided with a spur, *k*, and means, substantially as described, for operating said spur, as and for the purpose set forth.

6. In a machine for chamfering or thinning hoops and provided with a cutter-head, a guide or way having a depressed end, and a traveling carriage, as described, the weighted lever K, provided with a spur, *k*, and a hooked end, *i'*, in combination with the weighted lever I, provided with a hooked arm, *i*, and an arm, *o*, substantially as and for the purpose specified.

CROWELL M. CLANCY.

Witnesses:
H. S. SPRAGUE,
A. BARTHEL.