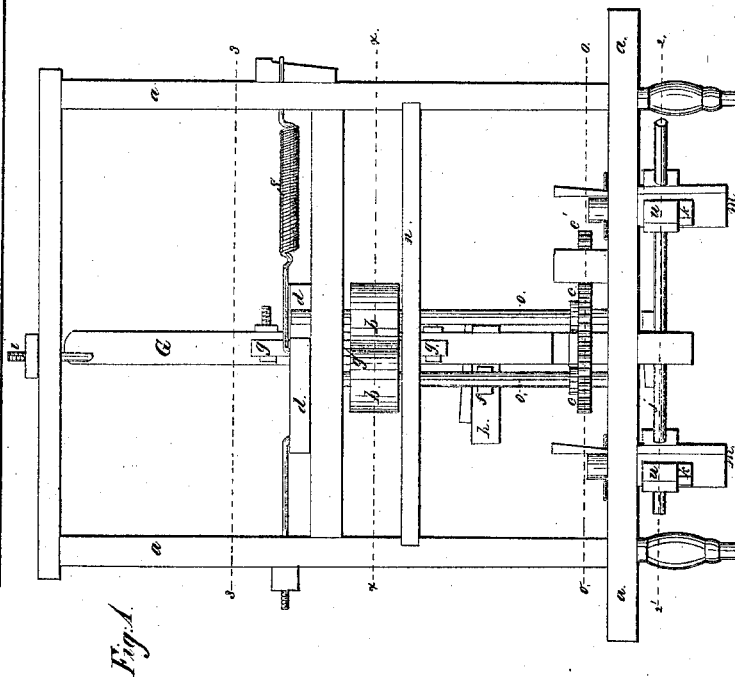
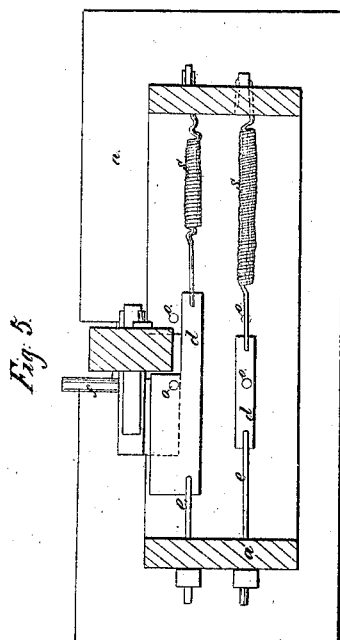
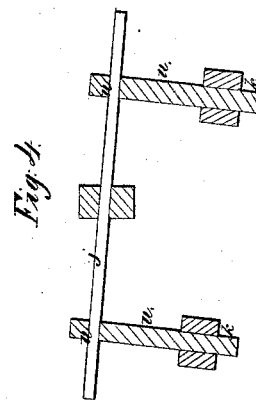
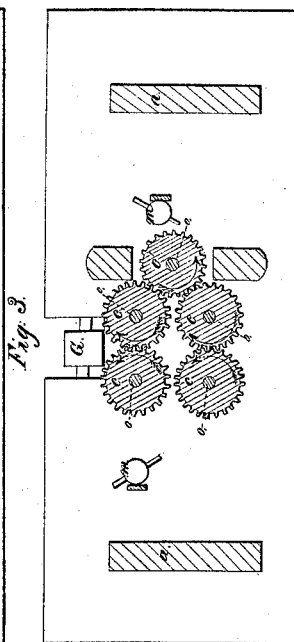
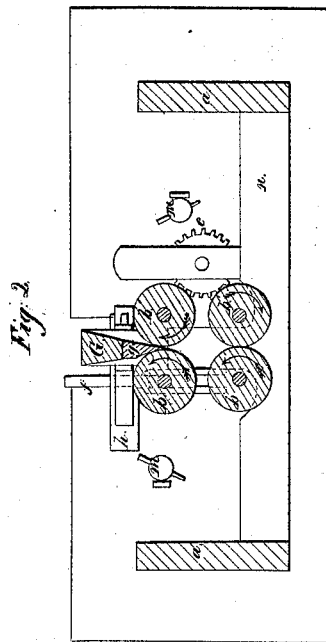


*W. Rose,*  
*Making Hoops,*  
*N<sup>o</sup> 3,727,      Patented Sep. 3, 1844.*



# UNITED STATES PATENT OFFICE.

WILLIAM ROSE, OF PHILADELPHIA, PENNSYLVANIA.

## MACHINE FOR SPLITTING HOOPS.

Specification of Letters Patent No. 3,727, dated September 3, 1844.

*To all whom it may concern:*

Be it known that I, WILLIAM ROSE, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Machine for Splitting Poles to Form Hoops, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a front elevation of the machine. Fig. 2 is a horizontal section at the line *x x* of Fig. 1. Fig. 3 is a horizontal section at the line *o o* of Fig. 1. Fig. 4 is a horizontal section at the line 2 2 of Fig. 1. Fig. 5 horizontal section at the line 3 3 of Fig. 1.

The frame *a* of this machine is made of any suitable size, shape, and material for the purpose intended. In this frame is arranged in a vertical position a triangular knife for splitting or dividing the pole into two parts. In front of this knife are arranged four, or more, rollers *b* for bringing the pole against the knife endwise causing the knife to divide the pole from one end to the other as it is carried forward by the aforesaid rollers by being passed between them. The axles of the rollers lettered *o* are vertical and parallel and have on them cogged wheels *c* working into each other to cause the rollers to turn together and at uniform speed, a fifth cog wheel *c'* being geared to two of the aforesaid cog wheels called the driving wheel to which the power is applied for turning the others. The lower ends of the 4 axles turn in boxes fixed in the frame. The upper ends of the two axles on the right hand side of the machine turn in permanent boxes secured in the frame. The upper ends of the two opposite or left hand axles turn in adjustable sliding boxes *d* to one of which last named axles the knife-stock *G* is connected by a crutch bar *f* for causing the knife stock to move laterally the same distance that the said axle is moved laterally when a large description of pole is inserted between the feeding rollers *b*.

An oblique bar *j* is placed in the lower part of the frame standing at an angle of about ten degrees with the front of the frame, or made to assume any required angle, by means of boxes *w* keys or wedges *k* and oblong mortises in hanging posts

*m* in the frame *a*. This oblique bar *j* changes the position of the knife laterally as well as longitudinally on the entrance of poles of various sizes between the rollers for the purpose of bringing the cutting edge of the knife to the center of the pole and at a proper distance from the rollers to effect the end proposed. When the pole is inserted between the rollers it crowds or pushes the rollers *b b* laterally from the opposite or corresponding rollers *b' b'* at the same time moving laterally the knife stock *G* and knife *g* with the aforesaid axles *o* of the rollers *b b*, said knife stock and axle being connected by the crutch bar *f* as before stated, and the said knife stock moving over or against the oblique bar *j* causes the knife stock to move laterally and outward from the rollers. The lower end or portion of the knife stock is perforated with an oblong aperture corresponding with the oblique bar which is passed through said aperture.

The upper end of the knife stock is suspended to the head of the frame by a screw *i* by which it is raised or lowered.

The sliding boxes of the axles *o o* are connected to the frame by screw rods *e e* and spiral springs *s s*, the former preventing the rollers touching and the latter allowing them to recede. A table or rest *n* is placed nearly on a level with the lower ends of the rollers for supporting the hoop poles in a proper position to be passed between the rollers to the knife. The pole is carried forward to the knife by the friction of the rollers turning against its outer or rough surface.

Other timber of convenient size may be split in the manner above described.

What I claim as my invention and desire to secure by Letters Patent is—

The manner of changing the position of the knife so as to bring its cutting edge to the center of the hoop-pole whatever its diameter may be by means of the aforesaid combination of suspended knife-stock *G*—crutch bar *f* and oblique adjustable bar *j* or other means substantially the same.

W. ROSE.

Witnesses:

JOSEPH W. JONES,  
MARSHALL A. JONES.