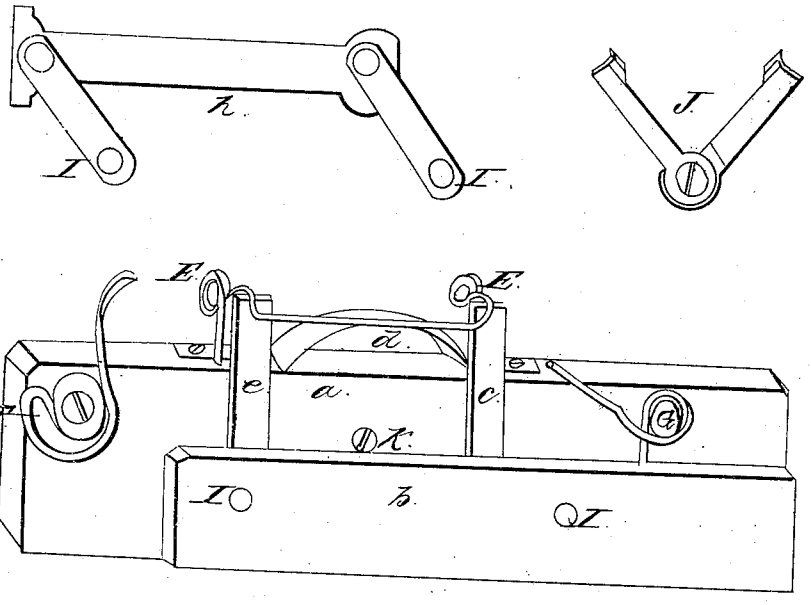
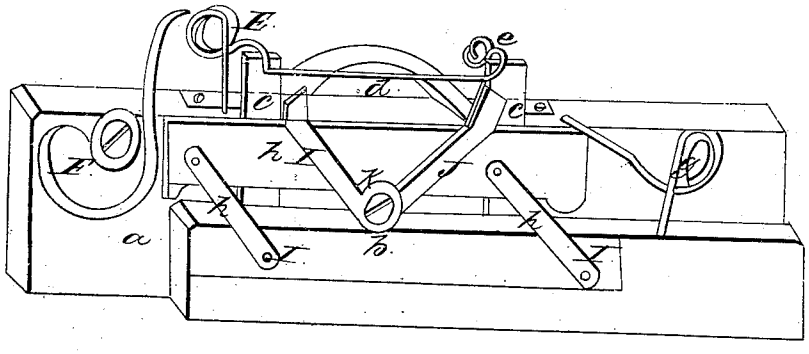
No. 9,986. PATENTED SEPT. 6, 1853.

J. BARNES.

MACHINE FOR EDGING LEATHER STRAPS.





Inventor:
James Barnes

UNITED STATES PATENT OFFICE.

JAMES BARNES, OF FRANKLIN, NEW YORK.

MACHINE FOR EDGING LEATHER STRAPS.

Specification of Letters Patent No. 9,986, dated September 6, 1853.

To all whom it may concern:

Be it known that I, JAMES BARNES, of the town of Franklin, in the county of Delaware and State of New York, have invented a new and useful Improvement on Machines for Splitting or Rounding Leather for Swelling Parts of Harnesses; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which the parts are fully referred to by letters.

The nature of my invention consists in constructing a machine so that by drawing through it strips of leather of different width they are all rounded to the same curve, so as to give uniformity to the swelling of different parts of a harness with one knife and without the change of any part of the machine, a single movement adjusting the gage to any width desired. I am aware that the rounding of leather has been atained by other instruments, but they have all lacked those essentials which would secure their introduction into general use and which mine possesses in an eminent degree, viz: cheapness and facility of working.

I construct of suitable metal, generally of iron, a square block about the size seen at *a*, with a projection *b*, of about one fourth of an inch, which constitutes the lower plate of a parallelogram, and two perpendicular columns *c*, *c*, slightly raised upon the face of the block and running about three eighths of an inch above the top of it, for the support of the spring on the top and the working of the parallelogram and gage against. The above may all be cast in one piece. Upon the top of the block *a*, I fasten a circular knife *d* bringing the edge between and nearly up to the face of the perpendicular columns *c*, *c*. I make a spring of a piece of wire, of sufficient length to extend from the center of one column to the other, make two angles and sufficient coil at each end, leaving the ends turned straight down to sink in the top of the block; so as to fasten firmly, and bring the spring over the top of the columns and in front of the top of the knife, to hold the leather tight to the gage, seen at *e*, *e*.

F, is a semicircle, with an arm extending from one of the extreme points, bolted or screwed between the center, and the point where the arm extends to the face of the block *a*, so as to work snug and nice.

G is a spring made of a piece of wire. One end of it is firmly sunk in the top of projection *b* coiled sufficiently for the spring and brought up by the side of the block *a*. *h*, is three sides of a parallelogram, jointed together, which is to be bolted or screwed to the block, and lower plate *a* and *b* at I, I, I, I, allowing the side plates to have free motion about the bolts or screws, bringing the side of the upper plate of the parallelogram against the two columns *c*, *c*, and one end against the semicircle F, at the point where the arm extends, the other under the spring, G.

J, is a pair of dividers, inverted, with a shoulder on each leg to rest upon the upper plate of the parallelogram and hold the leather straight to the arc of the knife, the pivot being a bolt or screw holding them to the block *a*, at *k*. The length of the legs, from the center of the pivot to the shoulder, are equal to one half the diameter of a circle corresponding to the arc of the knife.

It will now be seen that the above parts being put together as described the parallelogram and gage will work up and down to any desired point in front of the edge of the knife by the operation of the semicircle and spring upon them, the semicircle being held to any point which it is turned by the arm, by friction, and the operation of my invention, will then be as follows: A strip of leather being passed over the parallelogram and under the knife, if now the semicircle is turned it will raise the parallelogram and draw the dividers toward each other until they strike the edges of the leather. The relative position of the dividers to the arc of the knife will be the same whatever width the leather may be, and they will hold it true to the extreme cutting by the aid of spring *e*, which holds the leather tight to the gage, so that when the leather is drawn

through it will be rounded to true feather edges.

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

The combination of the parallelogram and inverted dividers as a regulating gage, to work in front of the edge of a curved knife, so that strips of leather, of different widths may be rounded to feather edges, with the same perfection, without the change of knife, or any part of the machine, the whole being constructed substantially in the manner herein described.

JAMES BARNES.

Witnesses:

FITCH FORD,

A. H. GRANT.