

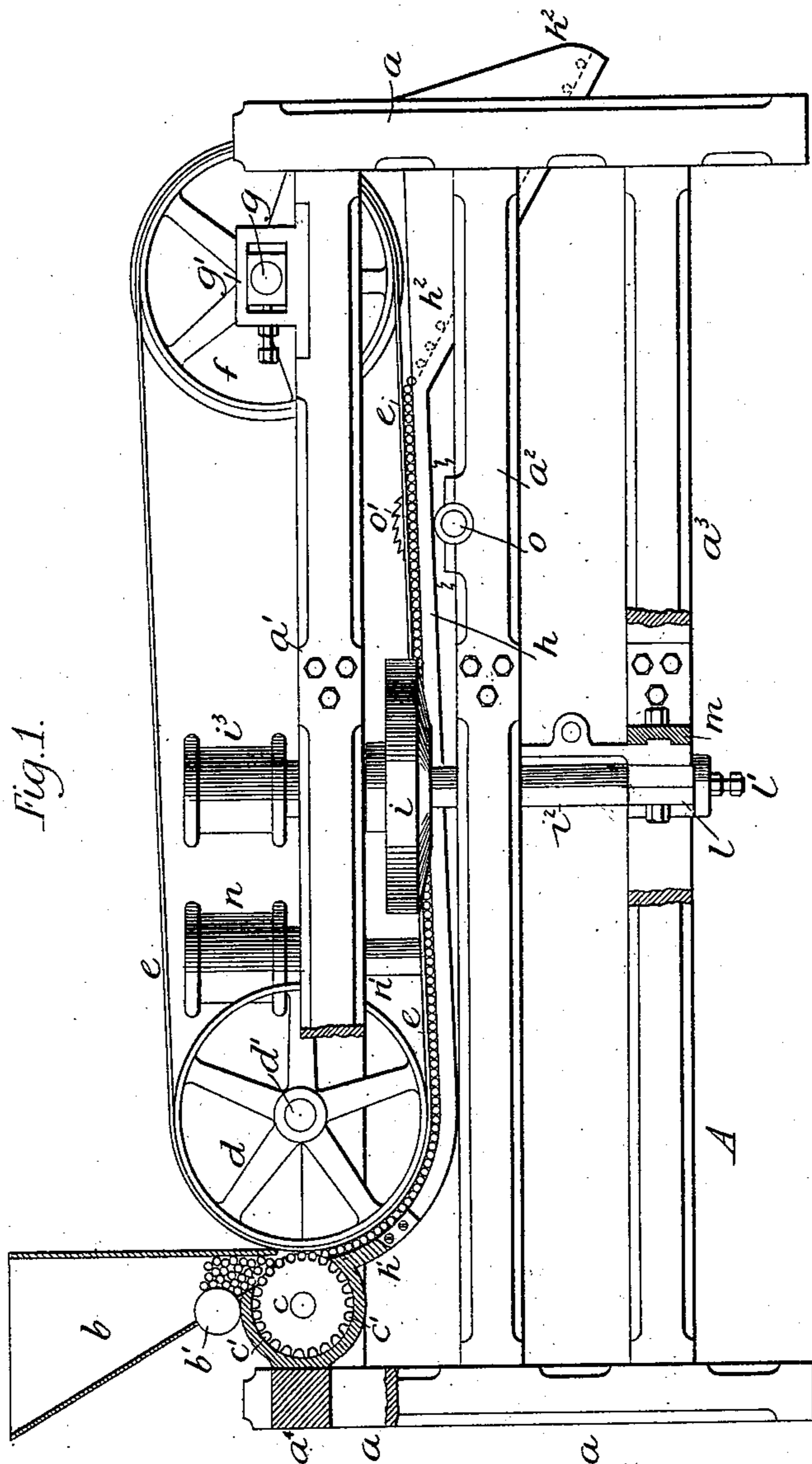
(No Model.)

2 Sheets—Sheet 1.

G. H. KEPHART.
MACHINE FOR POINTING PINS.

No. 557,209.

Patented Mar. 31, 1896.



Witnesses

SE Zimmermann
W. I. Norton

Inventor

George A. Kephart

By Lynna Bussey
his Attorney

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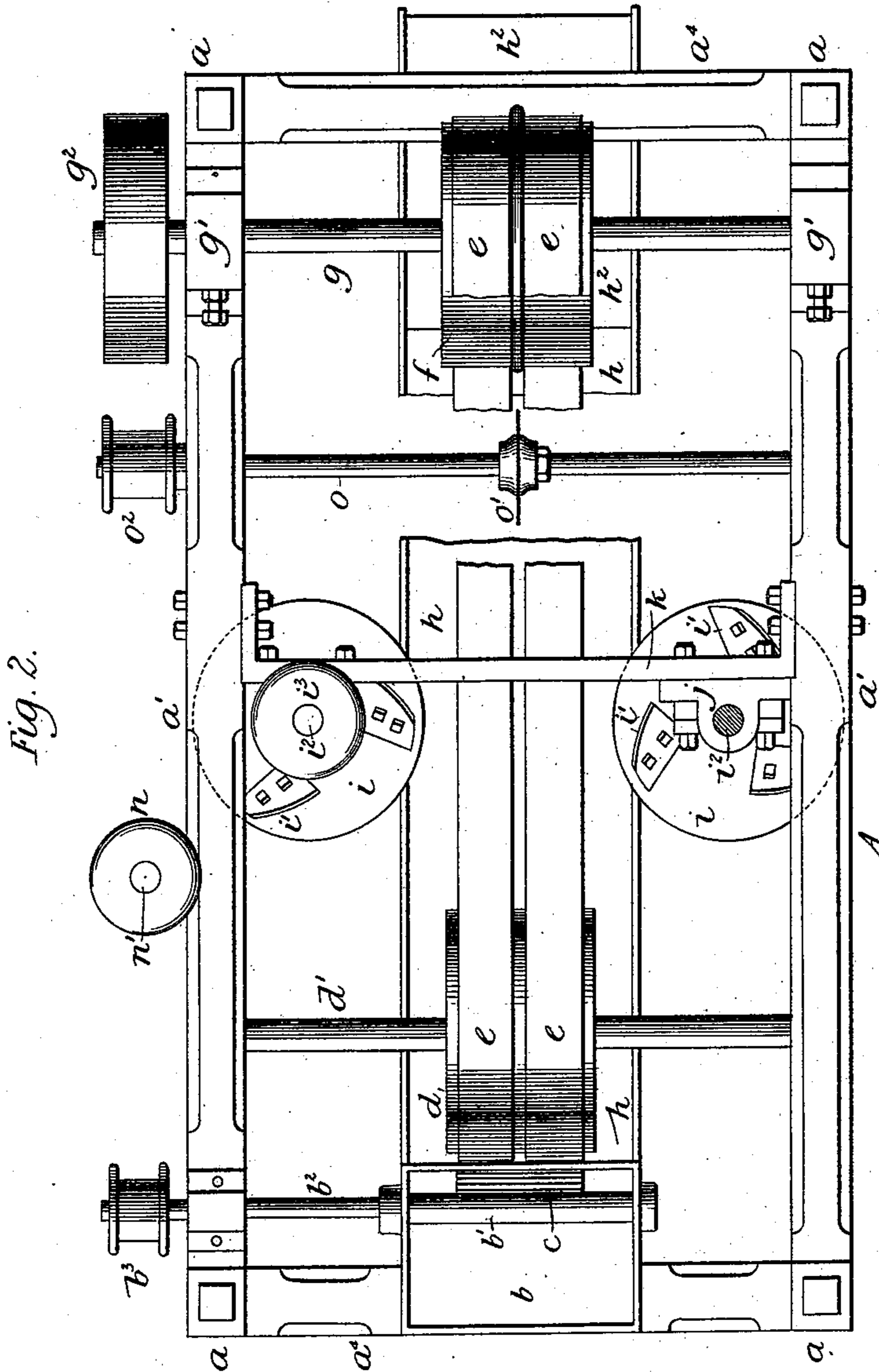
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UNITED STATES PATENT OFFICE.

GEORGE H. KEPHART, OF SPENCERVILLE, OHIO.

MACHINE FOR POINTING PINS.

SPECIFICATION forming part of Letters Patent No. 557,209, dated March 31, 1896.

Application filed May 3, 1894. Serial No. 509,942. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. KEPHART, a citizen of the United States, residing at Spencerville, in the county of Allen and State of Ohio, have invented certain new and useful Improvements in Machines for Making Wooden Pins; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in machines for pointing wooden pins, and is particularly directed to that class of such machines which are adapted for the manufacture of skewers for securing together the parts of meats and other articles.

The invention has for its object the production of a machine of this character possessing advantages in point of simplicity and durability, and by which the capacity is increased and a better article produced.

The nature of my invention will appear from a reading of the following description, when taken in connection with the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation, partly in section, of my improved machine; and Fig. 2 is a plan view, partly in section, of the same.

Referring to the drawings by letter, A denotes the frame of the machine, which consists of four uprights $a a a a$ connected together by side bars a' , a^2 , and a^3 and end bars $a^4 a^4$. In the forward end of the frame is located a hopper b , into which are deposited the blanks, and near the lower end thereof is a roller b' , which projects into the hopper and is mounted on a shaft b^2 , journaled in suitable bearings in the sides of the hopper and on the frame, and b^3 is a pulley on said shaft, which has belt connection with the source of power, and by the rotation of which the roller is actuated to right the blanks and feed them freely to a separator c below the hopper, which carries at its periphery a series of depressions c' , each one of which receives in practice one blank. Adjacent to the separator c is a pulley d mounted on a shaft d' journaled in bear-

ings in the side bars $a' a'$, and around this pulley are passed two belts $e e$, which in turn are passed around a pulley f mounted on the driving-shaft g in the rear end of the frame. The driving-shaft is journaled in compensating bearings $g' g'$ and carries a driving-pulley g^2 , which has belt connection with a suitable power. (Not shown.) Below the belt and separated therefrom a distance sufficient to accommodate the blanks and pins is a platform h , which is connected at one end to the box h' , which confines the separator, and at its other end to a chute h^2 , which carries off the finished pins or skewers.

At each side of the platform are arranged the cutter-heads $i i$ carrying adjustable cutting-knives $i' i'$, and these heads are secured on upright shafts $i^2 i^2$ carrying at their upper ends pulleys $i^3 i^3$, by which they are rotated. The shafts i^2 are journaled at their upper ends in bearings $j j$, adjustably secured to a bar k , secured at each end to the side bars a' , and at their lower ends in bearings $l l$ adjustably secured to a bar m secured to the side bars a^3 . These shafts are vertically adjustable by means of a bolt l' , the upper end of which impinges on the lower end of said shaft, this adjustment being for the purpose of pointing pins of any desired diameter. The lateral adjustment of the cutter-heads is for the purpose of pointing pins of any desired length, and by this arrangement also the shafts carrying the heads may be inclined in order to vary the length of the point on the pins, it being evident that, the bearings j and l being adjustable, the shaft carrying the cutter-heads may be made to assume a position inclining from the perpendicular.

n is a pulley secured to a vertical shaft n' mounted in bearings on the frame, said pulley having belt connection with the pulleys on the cutter-head shafts and with the source of power and serving to actuate said cutter-heads.

Mounted in suitable bearings on the side bars a^2 is a shaft o carrying a circular saw o' , the rotation of the latter being effected through a pulley o^2 on the shaft, and said saw is arranged to extend through a slot in the platform and above the latter and between the belts e , which, as shown, are slightly separated to accommodate said saw, the purpose

of which is to sever the blanks separately to form two pins from one blank.

Referring to the operation of my invention, it will be seen that by employing two cutter-
 5 heads, one at each side of the platform, the blanks are pointed at each end, and when severed centrally by the saw the blank is converted into two finished pins. The blanks are placed into the hopper and righted by
 10 the roller therein and drop separately into the depressions in the periphery of the separator, from whence, as the latter is rotated, they pass between the upper surface of the platform and the under side of the belts, and by
 15 the movement of the latter are given a rotary motion, or, in other words, are rolled under the cutter-heads, the knives of which operate with a shearing or whittling action to reduce each end of the blanks to a point. After the
 20 blanks are pointed they pass to the saw and are centrally severed, and the finished pins or skewers pass by the chute into a suitable receptacle.

By reason of the employment of the two
 25 cutter-heads the capacity of the machine is doubled, and by the arrangement of the knives whereby a whittling action on the blanks is effected the capacity is still further increased, inasmuch as the ends are reduced
 30 much more rapidly.

The machine is entirely automatic in character and is very simple in its construction and operation. The action is reliable and constant at all times, and the machine is very
 35 durable and not liable to readily get out of order.

I claim as my invention—

1. In a machine of the class described, the

combination of a hopper and a separator for feeding the blanks a platform leading from
 40 the separator, a traveling belt cooperating with the platform to impart a forward and rolling movement to the blanks, two cutter-heads one at each side of said platform and in the path of the blank ends for simultane-
 45 ously pointing both ends of the blanks, each of said cutter-heads comprising a circular disk horizontally arranged and mounted on a vertical shaft, and having its under side inclined toward the center, and provided with
 50 a series of tangentially-arranged cutter-knives, means for vertically and transversely adjusting said cutter-heads, and a device for severing the pointed blanks.

2. In a machine of the class described, the
 55 combination of a hopper and a separator for feeding the blanks a platform leading from the separator, a traveling belt cooperating with the platform to impart a forward rolling movement to the blanks, two cutter-heads one
 60 at each side of the platform each comprising a circular disk the under side of which inclines toward the center, provided with a series of tangentially-arranged cutter-knives, said heads being horizontally mounted on ver-
 65 tical shafts and arranged with the knives in the path of the blank ends, transversely-adjustable bearings for said shaft, means for adjusting the vertical position of the heads, and a saw for severing the pointed blanks.
 70

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE H. KEPHART.

Witnesses:

CHAS. G. POST,
 J. N. BAILEY.