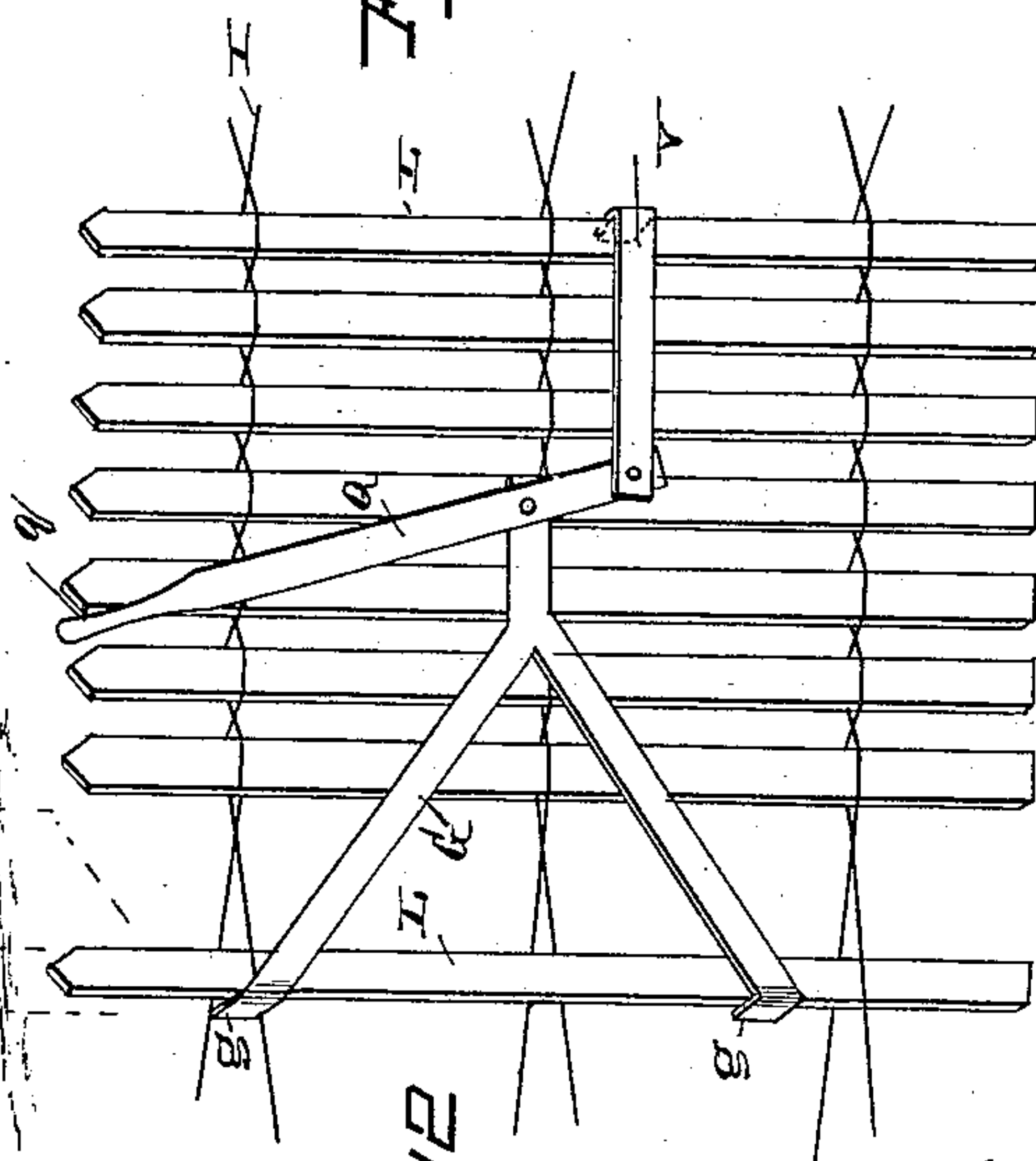
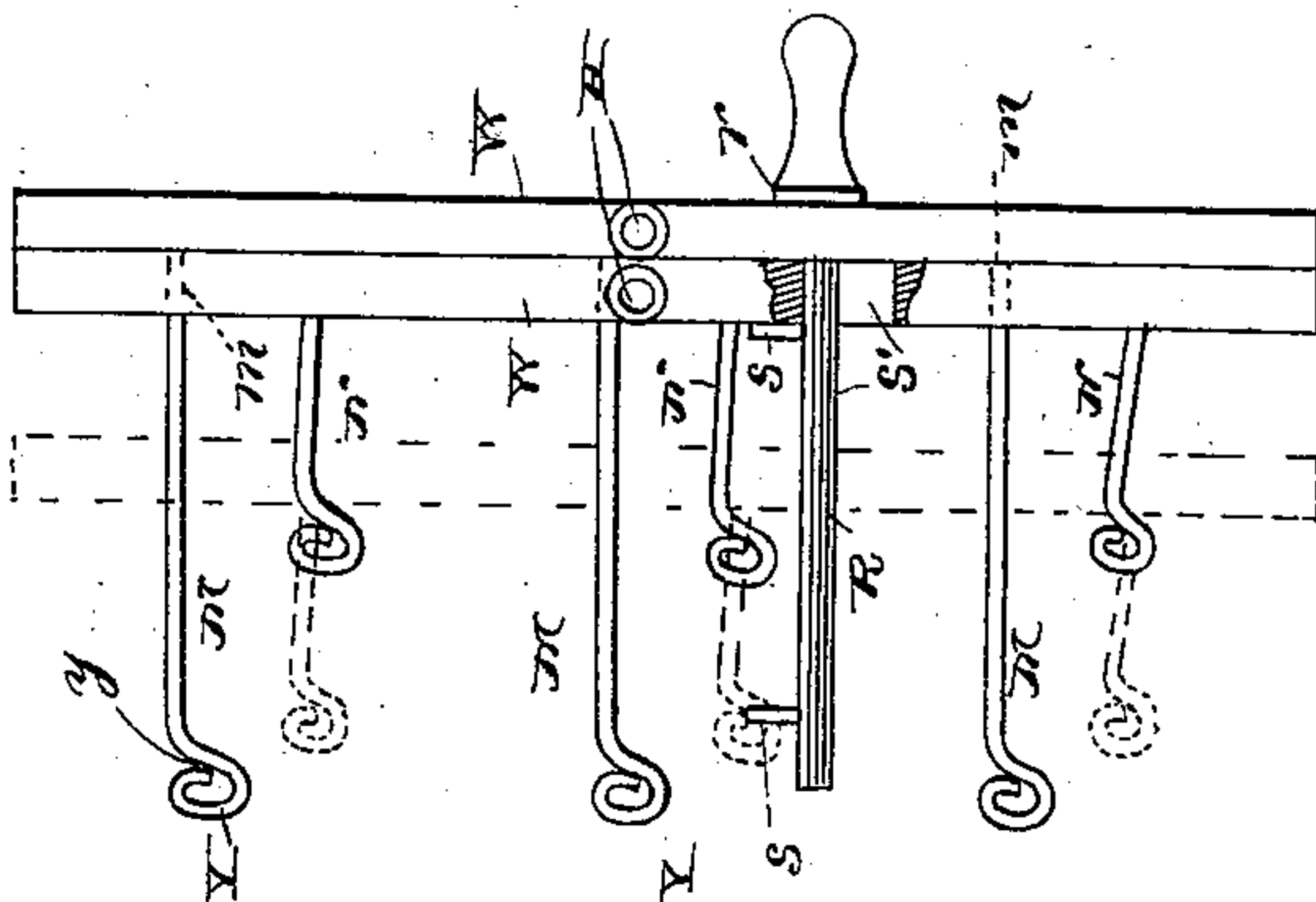
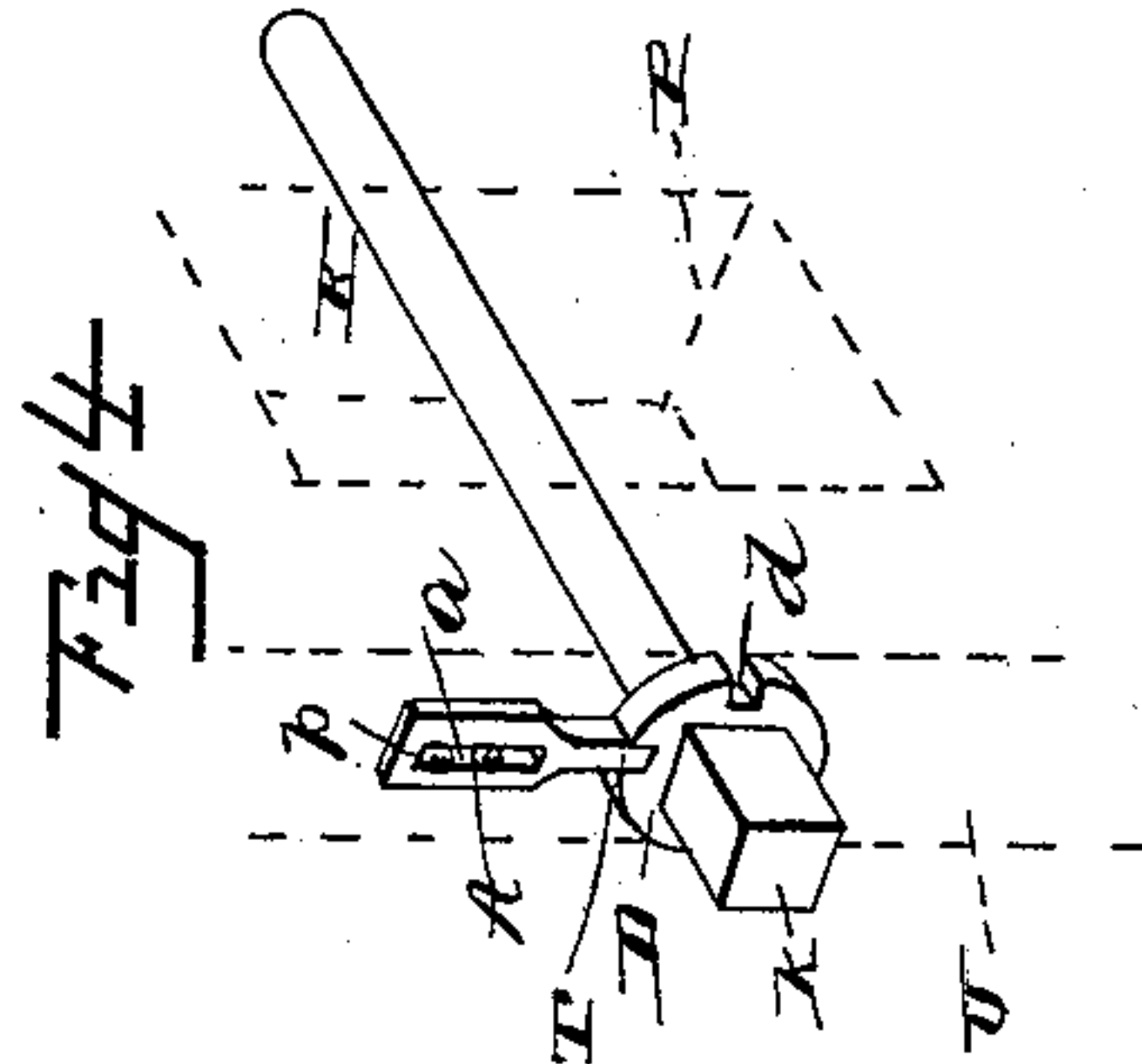
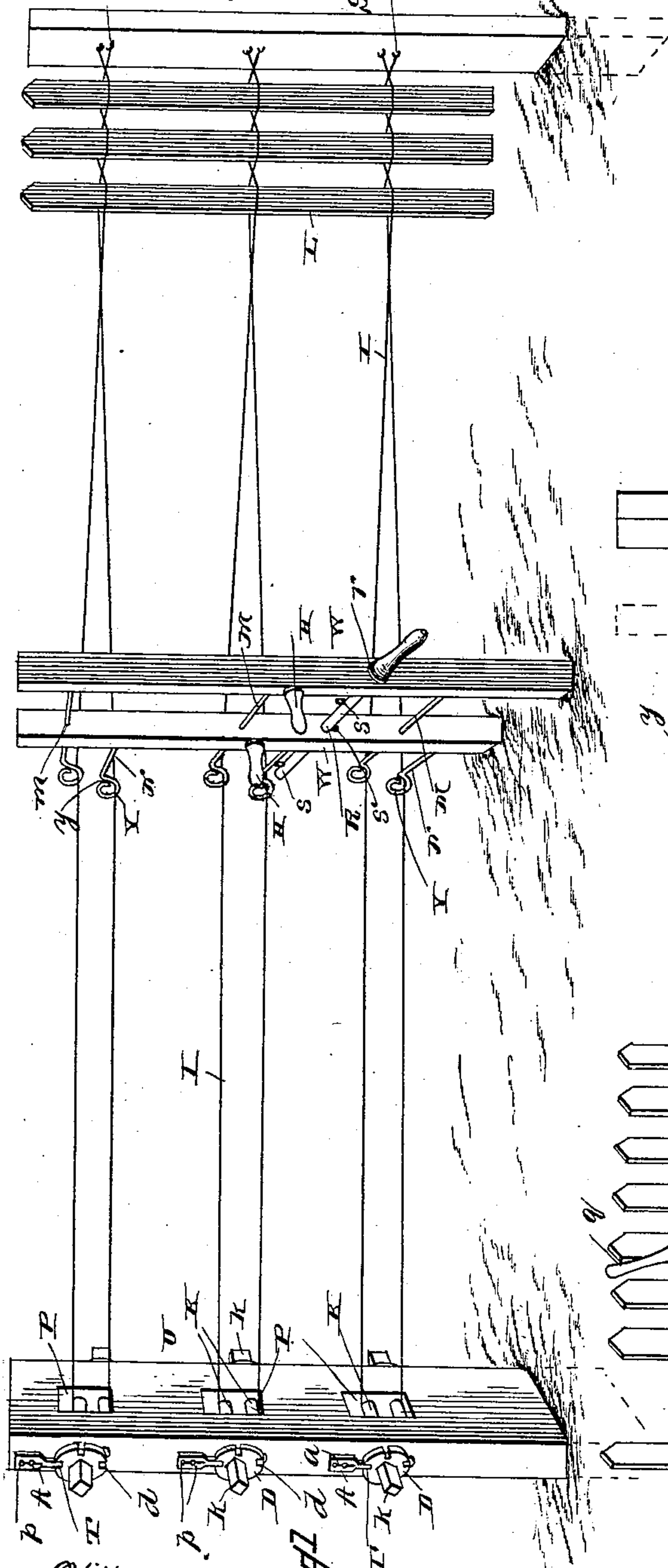


(No Model.)

G. W. WICKES.
MACHINE FOR MAKING PICKET FENCES.

No. 407,711.

Patented July 23, 1889.



Witnesses

John Murie
N. L. Collamer.

Inventor

Giles W. Wickes

By his Attorneys

Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

GILES W. WICKES, OF NEW MARKET, VIRGINIA.

MACHINE FOR MAKING PICKET FENCES.

SPECIFICATION forming part of Letters Patent No. 407,711, dated July 23, 1889.

Application filed April 23, 1889. Serial No. 308,256. (No model.)

To all whom it may concern:

Be it known that I, GILES W. WICKES, a citizen of the United States, residing at New Market, in the county of Shenandoah and State of Virginia, have invented a new and useful Machine for Making Picket Fences, of which the following is a specification.

This invention relates to devices or machines for making picket fences having vertical pales or pickets and longitudinal wires at top and bottom thereof and sometimes at intermediate points; and the invention consists of a stationary upright at one end of the section of fence being made, a perforated upright at the other end having keys for engaging the wires, and a "weaver" engaging the wires between said uprights sliding thereon and adapted to deflect said wires from their longitudinal lines to permit the insertion of a picket.

The invention also consists of a "picket-placer" for forcing the pickets into place in the bend of the wires, all as will be hereinafter fully described in the accompanying specification.

In the annexed drawings, forming a part of the said specification, and wherein the same letters of reference are applied to similar parts throughout, Figure 1 is a perspective view of my improved machine complete. Fig. 2 is a detached enlarged view of the picket-placer. Fig. 3 is a side elevation of my weaver; and Fig. 4 is a detached enlarged view of one of the keys above referred to, with the pawl for engaging the same.

Referring by letter to the said drawings, S designates the stationary upright, to which the several longitudinal wires I are attached at *i* in any preferred manner.

U designates a second upright set in the ground, as is the first, and located at the distance therefrom it is desired the length of the fence-sections shall be. The upright U has a number of transverse perforations P, and laterally through each of these perforations extend two keys K, having one outer end squared, as at *k*, whereby they may be turned by a wrench or other suitable instrument. Beneath said squared head *k* each key has an integral disk D, provided with a number of notches *d* in its periphery and adapted to lie upon and turn against the flat edge of the upright, as seen in Fig. 1. Near each disk a pawl A is

attached to the upright U, and engages the notches *d* to prevent the rotation of the disk. These pawls may be of any desired construction; but I prefer to make them as shown in Fig. 4, their bodies having vertical slots *a* engaging one or more pins or screws *p* in the edge of the upright, and provided with a downwardly-projecting tongue T, adapted to engage said notches *d* in the disks to prevent the rotation of the latter.

W W are two parallel vertical bars constituting the body of my weaver and connected by one or more rods R, journaled therein, and provided with heads *r* and handles on their front ends. Each rod R is provided with two cams or studs *s*, of a size adapted to pass through a slot *s'*, formed radially in the edge of the bearing in the rear bar W, the front stud *s* being placed the same distance from the head *r* as the thickness of the two bars combined, and the rear stud the same distance from the front one as the space between the inner faces of the bars when in their utmost separated position. The front of said bars W carries a number of long heavy wires M, extending loosely through holes *m* in the rear bar, and the said rear bar has a similar number of short heavy wires N, projecting rearwardly therefrom. There are as many pairs of these wires M N as there are pairs of wires I in the fence, and all of said wires M N are bent into a coil or eye Y at their free ends, slightly open at the top, as at *y*. The eyes on the short arms are located slightly below those on the long arms, and they are also located slightly to one side thereof, whereby they will not be liable to interfere when the bars W are moved relatively.

The operation is as follows: The fence-wires I are led from their coils or reels, passed through the perforations P in the upright U, given several turns or twists around the keys K within said perforations, and carried onward to the stationary upright S, where their ends are secured at *i* thereto in any desired manner. It will be understood that the uprights are inserted at their lower ends in the ground or in any suitable base, and stand such distance apart as it is desired the fence-sections shall be in length; also, that the fence-wires I are arranged, as above, in pairs at the upper and lower ends of the uprights and also at their centers or at intermediate

points between said upper and lower positions, if desired, all as shown in Fig. 1 of the drawings. My weaver is then brought into place, and the pairs of fence-wires engaged with the eyes Y in the free ends of the wires M N therein, as will be clearly understood. The rear of the bars W is then brought into contact with the front one by the operator, who grasps the body of the bars or handles H thereon, and this action spreads or separates the fence-wires I laterally at that point, wherefrom they taper toward the post S. A picket L is then inserted between the wires and pressed to the right close against the post S. The bars W are then separated to their greatest capacity, whereby the wires I I will be crossed in front of the picket L, already in place, and will diverge from the point of crossing to the eyes Y. A second picket is then inserted between the wires I I and pressed to the right close up against the first, and the operation is repeated until the fence-section is made. The pawls A are then lifted, whereby the keys K will be permitted to rotate, and the whole fence as far as constructed is drawn to the right, the several wires I being again secured at i to the post S, after which the operation may be continued indefinitely; or, if it be desired to build a fence in separate sections, after the first section is made the wires I are cut at or near the inner face of the upright U and the operation repeated from that point. The use of the keys will be clearly understood by all experienced fence-builders, as they are simply provided to tighten the wires I before the operation of constructing a section is begun, the pawls A holding them from relaxing after the desired tension has been given the fence-wires.

The weaver can be slid longitudinally upon the fence-wires, and in operative position is designed to stand comparatively close to the picket last applied in order that the spreading of the wires I may be as great as possible to facilitate the insertion of the next picket. The fence-wires of course stretch slightly at the insertion of each picket, and if they at any time become too loose they may be tightened by giving the keys a partial or entire rotation in the proper direction. The function of the rod R is to hold the bars W in either distended or closed position in case the operator should be called away or should desire to cease operations temporarily for any cause. To bring this rod into play, the bars W are placed in either extreme position and the said rod given a partial rotation, whereby the studs s thereon are turned out of alignment with the slot s', above mentioned, and the bars are held, if closed, between the front stud s and the shoulder r, or, if open, they are held so by resting against the outer faces of the two studs.

In the construction of fence-sections according to this process and by this machine, especially where said sections are long or the parts extra heavy, it frequently occurs that

the operator is not able by hand to force the pickets into place between the tapering wires with as great ease, dexterity, accuracy, and symmetry as may be desired, and in order to overcome this difficulty, as well as to render the working of the machine less tiresome, I have provided a device which I term a "picket-placer," and which will now be described, Fig. 2.

The letter G designates a Y-shaped grapple having feet g at the ends of its two arms, and to the other end of this grapple is pivoted a short lever Q, whose upper or free end is provided with a handle q. At its lower end the lever Q is pivoted to the inner end of a hook V, which latter is adapted to engage one of the pickets already in place and remote from the one being applied. The feet g are engaged with the picket being inserted, as seen in the drawings, and by applying force to the handle q in the proper direction said picket is forcibly drawn into place. The placer is then moved forward one picket and is ready for further use, all as will be readily understood by a person skilled in the art to which this invention appertains.

Having thus described my invention, I claim as the salient points thereof—

1. The weaver herein described, the same comprising the front and rear bars W W, long wires M on the front of said bars passing loosely through holes in the rear bar, and wires N on the rear bar extending rearwardly therefrom, all of said wires having eyes Y on their rear ends, the whole adapted for use substantially as described.

2. The weaving-bars W W and the wires M N, carried thereby, in combination with the rod R, journaled loosely in said bars and having heads r on its front end and studs s s on its body, said studs being adapted to pass through a slot s' in the edge of the bearing in the rear bar, the forward stud being placed a distance from said head equal to the combined thickness of the two bars, and the rear-most stud being placed a distance from said forward stud equal to the distance between the inner faces of said bars when in their utmost distended position, as and for the purpose set forth.

3. The picket-placer herein described, the same comprising the hook V, the lever Q, pivoted at one end to the free end of said hook, and the grapple G, forked in its body and having feet g at its front ends adapted to engage the picket being applied, said grapple being pivoted at its rear end to the lever Q, intermediately between its ends, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GILES W. WICKES.

Witnesses:

G. W. CRIM,
JOHN W. BURKE.