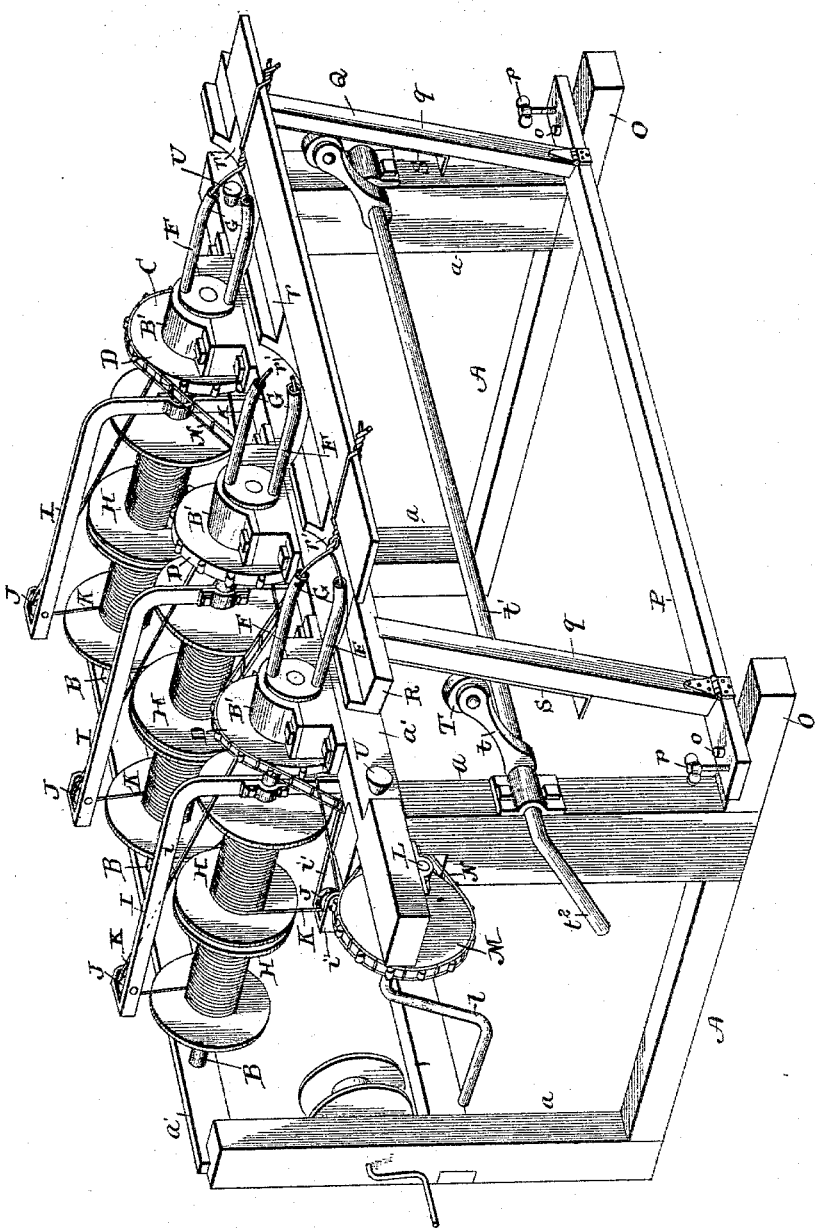
(No Model.) 3 Sheets—Sheet 1.

J. A. BARBREY.

FENCING MACHINE.

No. 490,261. Patented Jan. 24, 1893.

FIG. 1.



Witnesses

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(No Model.) 3 Sheets—Sheet 2.

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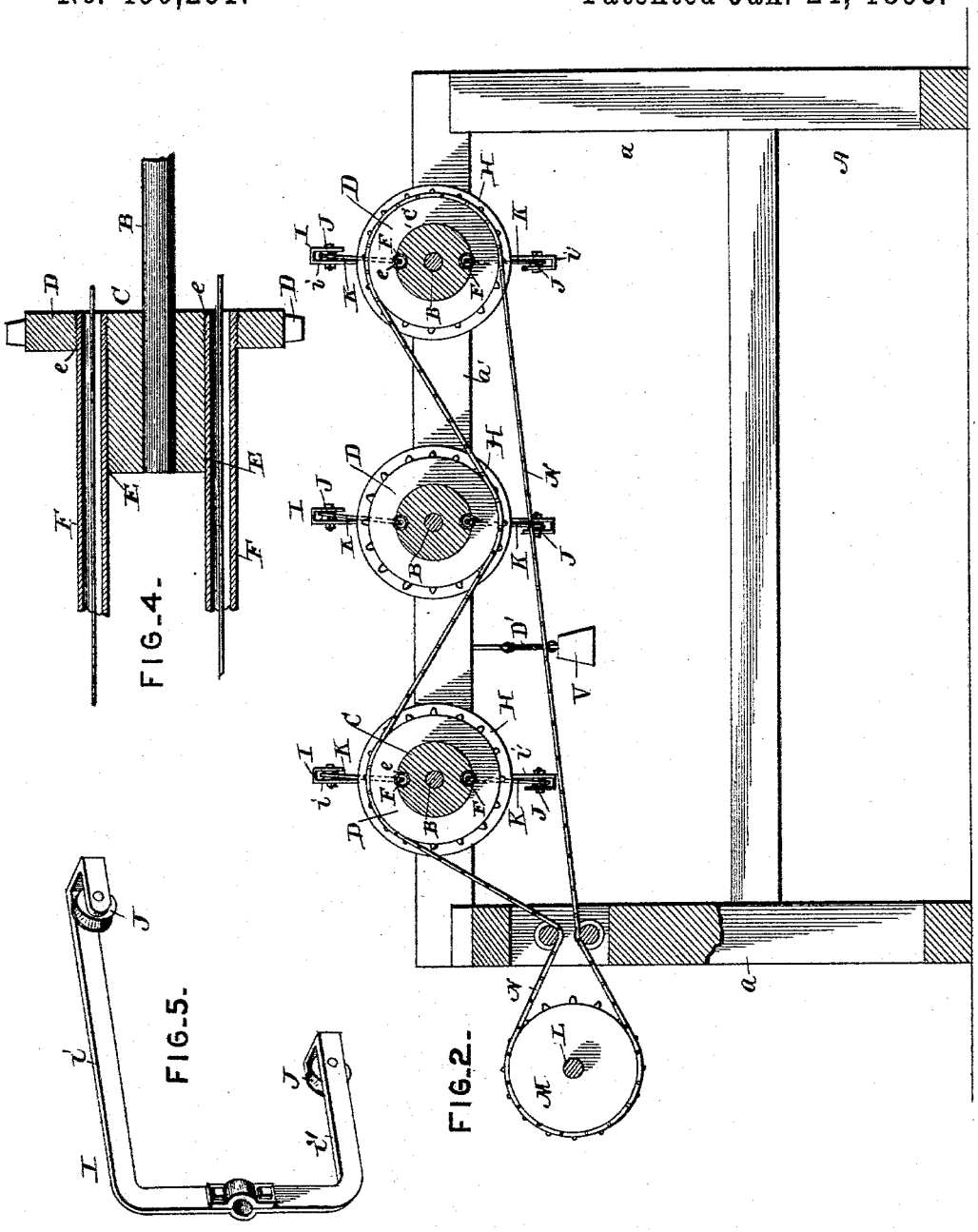

FIG. 4.

FIG. 5.

FIG. 2.

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(No Model.) 3 Sheets—Sheet 3.

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FENCING MACHINE.

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FIG. 3.

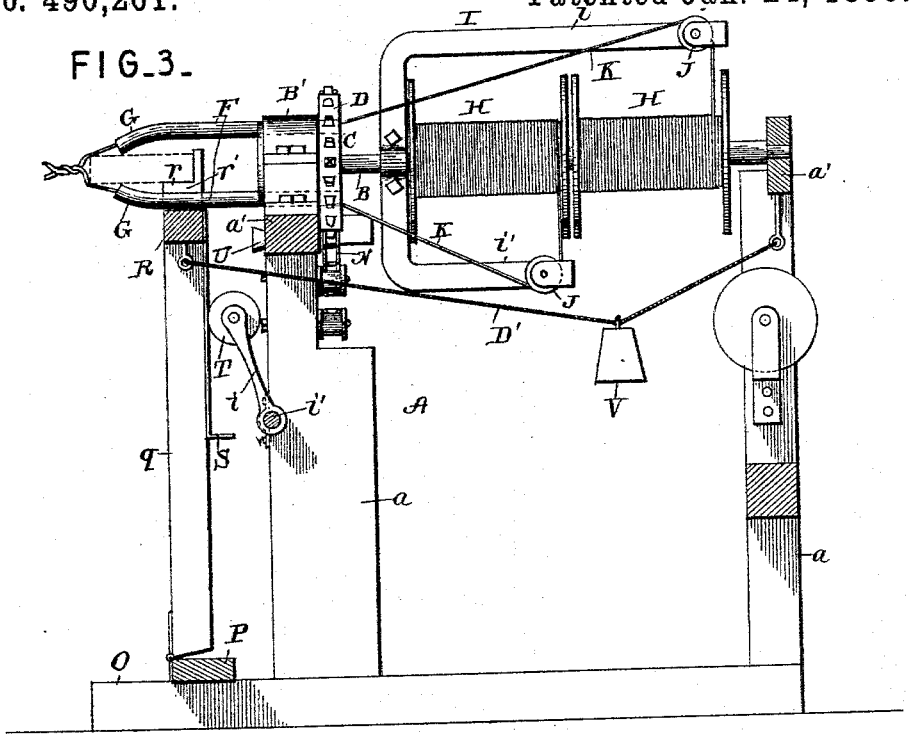
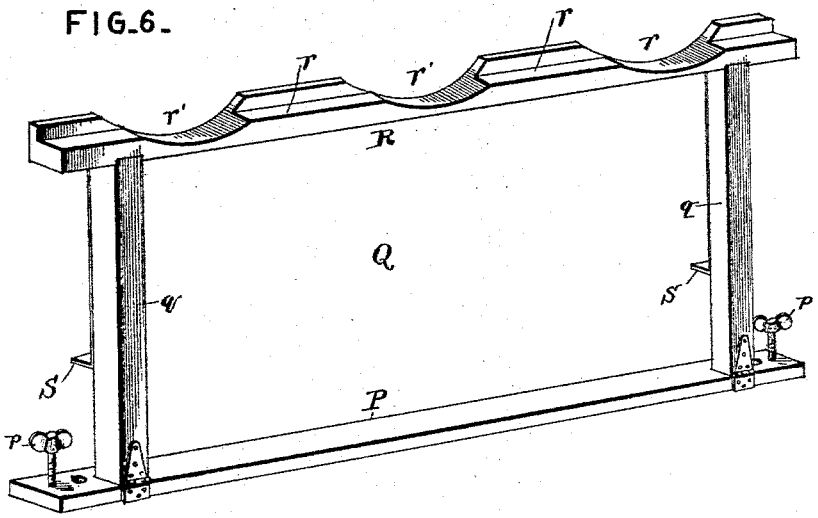


FIG. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

JESSE A. BARBREY, OF BRUNSWICK, GEORGIA.

FENCING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 490,261, dated January 24, 1893.

Application filed July 25, 1892. Serial No. 441,153. (No model.)

To all whom it may concern:

Be it known that I, JESSE A. BARBREY, a citizen of the United States, residing at Brunswick, in the county of Glynn and State of Georgia, have invented a new and useful Fencing-Machine, of which the following is a specification.

This invention relates to fencing machines; and it has for its object to provide an improved machine of this character simple in construction and operation but one which will rapidly weave the ordinary picket fences in a much more convenient manner than other fence looms of this character.

To this end the main and primary object of the invention is to effect general improvements with respect to both simplicity and efficiency.

With these and many other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings;—Figure 1 is a perspective view of a fence machine, constructed in accordance with this invention. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a vertical transverse sectional view thereof showing one of the twisting shafts. Fig. 4 is an enlarged detail sectional view through one of the twisting heads or sleeves. Fig. 5 is a detail in perspective of the wire tension guides. Fig. 6 is a detail in perspective of the removable swinging batten frame.

Referring to the accompanying drawings;—A represents a suitable frame comprising the end uprights *a*, and the connecting bars *a'*, connecting the upper ends of said uprights. Journaled transversely in the top of said frame upon said connecting bars *a'*, is a series of parallel twisting shafts B, adapted to be oscillated or entirely rotated as will be hereinafter set forth. Securely fastened to one end of said shafts, which may be termed the front end thereof, are the wire twisting heads or sleeves C. The said twisting heads or sleeves C are provided upon their inner ends with the integral or separate sprocket wheels D, and the opposite side slots E, which slots lead into the openings *e* through said sprocket wheels, and which together with said side slots accommodate the opposite wire guide and twisting tubes F. The said wire guide and twisting tubes F are securely fastened at their inner ends in the openings or perforations through the sprocket wheels, and resting loosely in the slots E in the sides of the twisting heads or sleeves, project beyond the outer ends of the same and terminate in curved ends G, bent toward each other, so that the wires passing through said tubes will be held flat upon the picket against which the wire is being twisted. The said twisting heads or sleeves are steadied in their rotation or oscillation by the front bearing boxes B' arranged upon the top and front of the frame A.

Upon each of the twisting shafts B is mounted a pair of wire spools H, each spool accommodating the wire which is to be fed through one of the twisting tubes of the same shaft on which it is mounted, while the other adjacent spool carries the wire for the other twisting tube of the shaft. Secured to and carried by each of the twisting shafts B adjacent to one of the spools are the tension guides I. The said tension guides I comprise the opposite right angularly disposed long and short arms *i*, and *i'*, respectively, which arms are designed to extend over opposite sides of the respective spools of the shaft upon which the same are mounted and carry in their outer ends the guide rollers J which receive the wire K from that spool over which the end of the arm lies, and not only guide the wire to the twisting tubes and prevent the same from being twisted on the shaft, but also at the same time provide a sufficient tension to keep the wire sufficiently taut while weaving the same over the pickets.

Arranged at one end of the frame A is the operating shaft L having a crank handle *l* to operate the same, and carrying the sprocket wheel M. An endless sprocket chain N passes continuously from said sprocket wheel M over the several sprocket wheels of the twisting shafts and thus serves to simultaneously communicate motion to the several twisting shafts in order to rotate the same and twist the wire around the pickets comprising the fence.

The lower front portion of the frame of the machine is provided with the extended sill

arms O, provided with the upwardly extending studs *o* which receive the perforated ends of the batten sill P. The said batten sill P is thus removably mounted upon the frame of the machine and in front thereof, and is capable of an up and down vertical movement which is adjusted by means of the set screws *p*, passing through the ends thereof and working upon the extended sill arms, O, of the frame A.

Hinged at its lower end to the sill P is the picket batten frame Q, which frame comprises the arms, *q*, hinged at their lower ends to said sill, and the connecting picket rest R, connecting the upper ends of said arms, *q*. The said picket rest R is provided with a flanged seat *r* upon which the loose picket is placed in weaving the wire therearound, and said rest bar is further provided with the curved notches *r'* directly in front of the outer ends of the twisting sleeves and adapted to accommodate the twisting tubes of such sleeve. Secured to the inner faces of the hinged arms *q*, of said batten frame are the metallic wear plates S, which are designed to receive the rollers T at the ends of the cam or batten opening arms *t*. The said arms *t* are mounted upon the rock shaft *t'*, journaled in the front of the frame, A, below the top connecting bar thereof, and said rock shaft is provided at one end with an operating handle t^2, which when grasped by the operator throws the arms *t* against the batten frame, and swings the same out past the ends of the twisting tubes in order to allow the wire to be twisted against the loose picket, after which operation the batten frame is returned to its normal vertical position under the twisting tubes and against the buffers or stops U, by means of the weighted cord D' connected therewith, or by other suitable means such as a spring. The threading of the wire twisting tubes from the tension guides will be at once apparent, the wire being in the first place carried sufficiently far beyond the outer ends of the wire tubes to allow a loose picket to be placed upon the flanged picket rest, and between the twisting tubes of the machine as illustrated in the drawings. The outer ends of the wires are connected together, and by means of the rock shaft *t'*, the batten frame is moved out beyond the outer ends of the twisting tubes, which tubes will spread sufficiently to allow the picket to pass out between the same, if of an extra large size. After the picket has been thrown out beyond the twisting tubes, which operation at the same time spins out the wire so as to be ready to receive the next picket, the twisting shafts are turned by the devices already described and the wire thereby twisted any number of turns as desired. By releasing the hold from the rock shaft, the batten frame is returned to its place by means of the weight V and is ready to receive another picket and be controlled in the same manner as set forth; but a spring or any other means may be employed to automatically return said frame to its place.

It will of course be understood that as many twisting shafts may be employed as desired.

Having thus described my invention, what I claim and desire to secure by Letters Patent is;—

1. In a fence machine, the combination with the frame, of parallel twisting shafts journaled on said frame, a pair of wire spools mounted side by side and longitudinally on each shaft and loosely thereon, tension guides fixedly secured to each shaft and having guide arms one of which arms extends over one side of one spool and the other of which arms extends over the opposite side of the other spool, on the same shaft to which they are secured, twisting heads or sleeves carried upon one end of said shafts, opposite wire tubes passing through each twisting head or sleeve and threaded from said spools, and a vertically adjustable swinging batten arranged in front of said twisting heads under said tubes and having a fixed picket seat, substantially as set forth.

2. In a fence machine, the combination with the frame, of the opposite parallel twisting shafts journaled upon said frame, a pair of wire spools mounted upon each shaft, a single tension guide fixedly secured to each shaft and having opposite right angularly disposed long and short arms carrying guide rollers at their ends which receive the wire from the spool at one side of which they lie, the long arm of each guide lying parallel with and extending to or over one side on one spool and the short arm of the same guide lying parallel with and extending over the opposite side of the other spool on the same shaft, and twisting devices mounted upon one end of said shafts and having separate wire openings receiving the wire from said guide rollers, substantially as set forth.

3. In a fence machine, the parallel twisting shafts carrying separate wire spools, twisting heads or sleeves mounted upon one end of said shafts and provided with opposite side grooves and an inner sprocket wheel, wire twisting and guide tubes mounted in the side grooves of said sleeves and having outer curved ends turned toward each other and projecting beyond the outer ends of said sleeves, an endless drive chain passing continuously over said sprocket wheels, and a swinging adjustable picket rest or batten moving under and beyond said wire tubes, substantially as set forth.

4. In a fence machine, the combination with the frame and the twisting devices mounted upon said frame; of a movable sill arranged at the front lower end of the said frame, means for vertically adjusting said sill, a swinging picket rest frame or batten hinged at its lower end to said adjustable sill and adapted to move under and beyond said

twisting devices, and means for swinging said batten out from the frame and automatically returning the same, substantially as set forth.

5. In a fence machine, the frame having the front sill-arms provided with upwardly extending studs, twisting devices mounted upon said frame, a vertically adjustable sill mounted upon said sill arms and moving over said studs, swinging arms hinged at their lower ends to said vertically adjustable sills, a picket rest connecting the upper ends of said arms and provided with a flanged picket seat, and means for moving said swinging arms outward and automatically returning the same, substantially as set forth.

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

JESSE A. BARBREY.

Witnesses:
ADOLPH M. COHEN,
ISAAC S. COHEN.