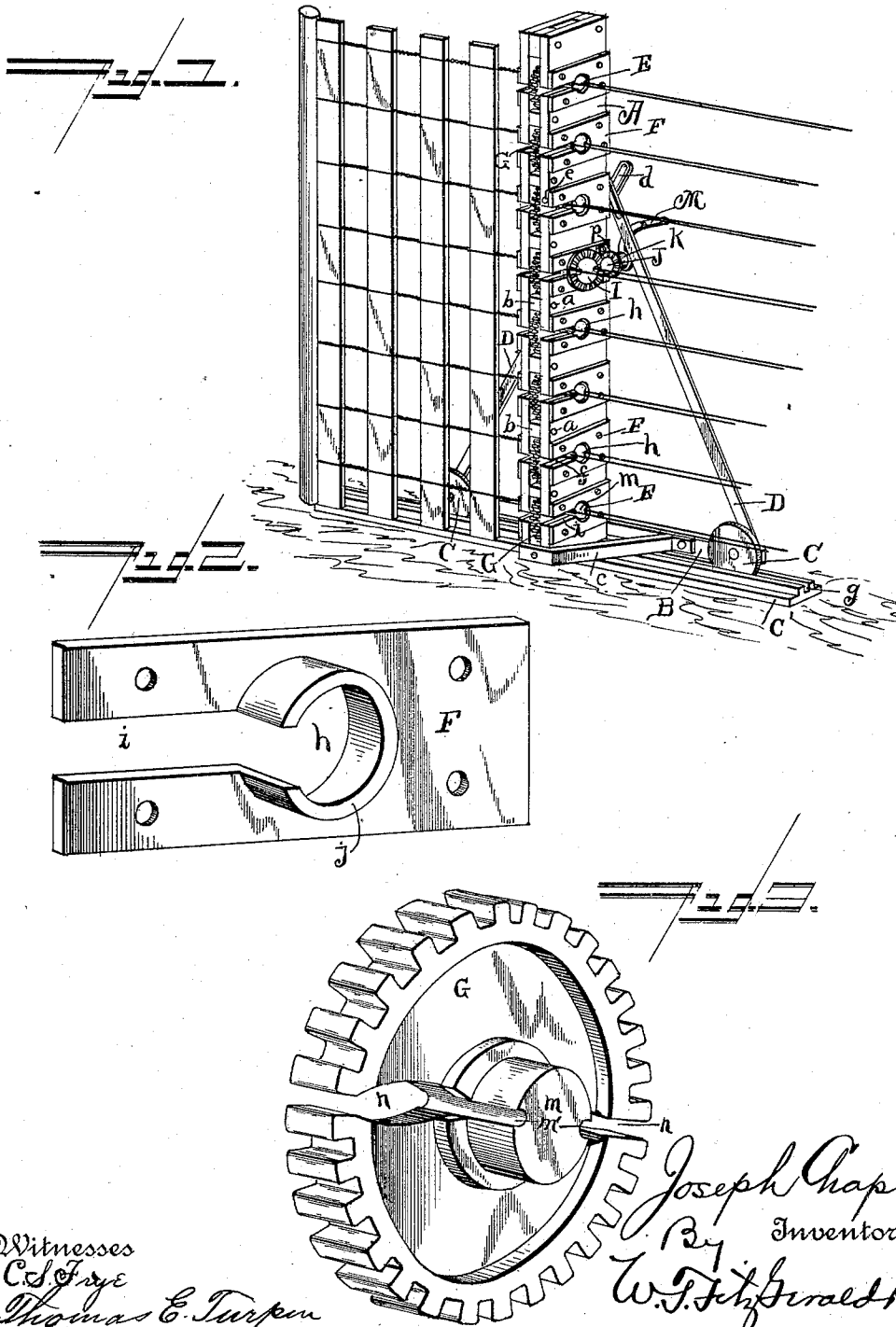


(No Model.)

J. CHAPLIN.
FENCE MACHINE.

No. 474,794.

Patented May 10, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH CHAPLIN, OF NORTH MANCHESTER, INDIANA, ASSIGNOR OF ONE-HALF TO WILLIAM VOGHT, OF SAME PLACE.

FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 474,794, dated May 10, 1892.

Application filed November 23, 1891. Serial No. 412,796. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH CHAPLIN, a citizen of the United States, residing at North Manchester, in the county of Wabash and State of Indiana, have invented certain new and useful Improvements in Fence-Machines; and I do hereby 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.

My invention has relation to improvements in fence-machines, and its novelty will be fully understood from the following description and claim, when taken in conjunction with the accompanying drawings, in which—

Figure 1 is a perspective view of a section of fence with my improved machine in an operative position. Fig. 2 is an enlarged perspective view of one of the bearing-plates, and Fig. 3 is a similar view of one of the twisting-wheels.

Referring by letter to the said drawings, A indicates the vertical parallel uprights of my improved machine, which are of a height in proportion to the number of twisting-wheels employed and are connected at their lower and upper ends and at suitable intermediate points in their length by transverse bolts *a*, said uprights being held rigidly apart by means of the interposed blocks *b*, through which take the connecting-bolts.

Rigidly connected to the uprights A at the lower end thereof is a horizontal frame-bar B, which extends at right angles to the plane of the uprights, and is provided adjacent to its respective ends with traveling wheels C. This frame-bar B is braced by an angular strap *c*, connected to the opposite side of the uprights, and pivotally connected to the free ends of the said bar B are straps D, which are provided adjacent to their upper ends with longitudinal slots *d* to receive a bolt *e*, through the medium of which said straps are adjustably connected to the uprights.

In the practice of my invention the traveling wheels C are of such a width as to take into the guideway *g* of a plank or board C', which serves, as better shown in Fig. 1, to hold the machine in an upright position and guide it in a longitudinal direction.

Formed at intervals in the uprights A are aligned and transversely-disposed circular openings E, the number of which varies in accordance with the number of twisting-wheels employed. Radiating from the circular openings E, which are designed to receive the bearing-plates of the twisting-wheels are horizontal slots *f* to allow of the introduction of the wires into the diametrical slots of the twisting-wheels presently to be described.

F indicates the bearing-plates for the twisting-wheels, which plates are connected to the sides of the uprights by screws or the like and are respectively provided with a circular opening *h* and a radial horizontal slot *i* to conform with the opening and radial slot in the uprights A. Surrounding the circular opening in the bearing-plates F and extending from edge to edge of the radial slot *i* is an inwardly-directed flange *j*, which serves as a bearing for one of the trunnions of the twisting-wheels, and in addition bears against the sides of said wheel and prevents lateral play thereof. As will be readily perceived, these plates F, in addition to affording bearings for the twisting-wheels, serve to reinforce and strengthen the frame-uprights and render the same more staunch and durable.

G indicates the twisting-wheels of my improved machine, which are preferably of the proportional diameter and are provided with peripheral cog-teeth, as illustrated. Preferably formed integral with the wheels G, which mesh with each other, as illustrated, and extending in opposite directions from the center thereof are the solid lateral trunnions M, which bear in the circular openings of the bearing-plates F, as better illustrated in Fig. 3 of the drawings. Formed in the respective twisting-wheels G, as better illustrated in Fig. 3 of the drawings, are oppositely-directed radial and transverse slots *n*, which are designed to be brought into alignment with the transverse slots in the uprights A and bearing-plates F to receive the wires to be twisted. Formed at diametrically-opposite points in the trunnions *m* of the twisting-wheels G, at the inner ends of the radial transverse slots *n*, are grooves *m'*, which extend the full length of the trunnions and are designed to seat the wires to prevent the same from bind-

ing against the inner side of the flanges *j* and from engaging the corners of the radial slots *i* when the wheels are turning.

Suitably fixed upon the extended trunnion of one of the twisting-wheels *G*, preferably the middle wheel, is a bevel-gear-wheel *I*, with which meshes a bevel-pinion *J*, which is fixed on a short shaft *K*, journaled in a bracket *p*; connected to one of the uprights *A*. Fixed upon the ends of the shaft *K* is a crank *M*, through the medium of which the twisting-wheels are set in motion, and the wires are twisted between the fence-pickets.

In the operation of my improved machine the wires are fastened to one post and are then stretched by a suitable tension device located back of another and finishing post. The machine is then placed in position and the twisting-wheels turned to bring their slots into alignment with the slots of the uprights and bearing-plates to receive the wires. After the wires have been placed in the slots of the wheels said wheels are rotated to twist the wires the distance required when a picket is placed in position, and the wires are again twisted when another picket is placed in position, and so on until the section of fence is completed, when the wires are suitably connected to the finishing-post. By the provision of the twisting-wheels having the central solid trunnions provided with the grooves *m'* it will be readily perceived that the apertures formed in the sides of the uprights *A* to re-

ceive the flanges *j'* of the bearing-plates *F* may be made so small as not to materially weaken the said uprights.

I am well aware of the construction of fence-machine disclosed in Patent No. 375,434, granted to Woodman and Evans December 27, 1887, and I therefore make no claim to the same; but

What I claim, and desire to secure by Letters Patent, is—

In a fence-machine, substantially as described, the combination, with the uprights having the transverse openings and the radial horizontal slots leading from said openings to their vertical edge, and the bearing-plates attached to the sides of said uprights and having the circular opening, the transversely-disposed radial slot, and the inwardly-extending flange partly surrounding said circular opening, of the peripherally-toothed twisting-wheels meshing with each other and having the transversely-disposed radial slots, and the solid laterally-extending central trunnions provided at diametrically-opposite points with the grooves *m'*, and a suitable means for rotating the said twisting-wheels, substantially as specified.

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

JOSEPH CHAPLIN.

Witnesses:

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D. C. HARTER.