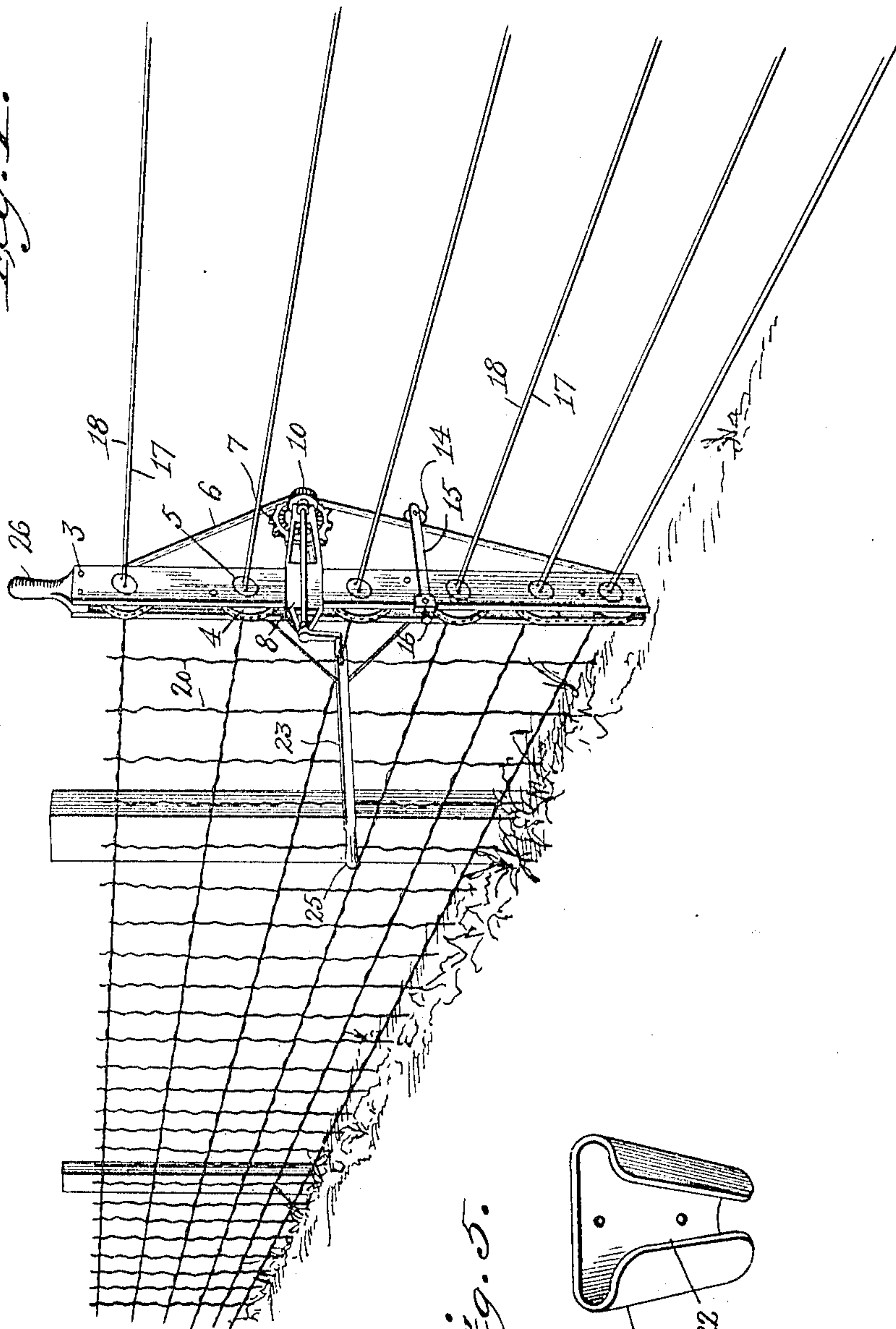


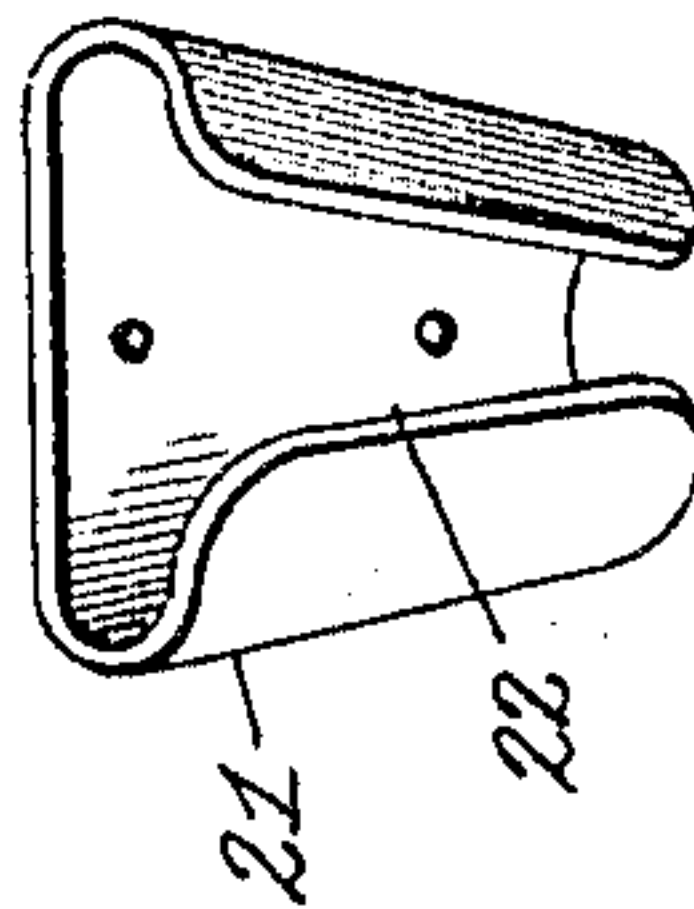
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Fig. 1.



749.5.



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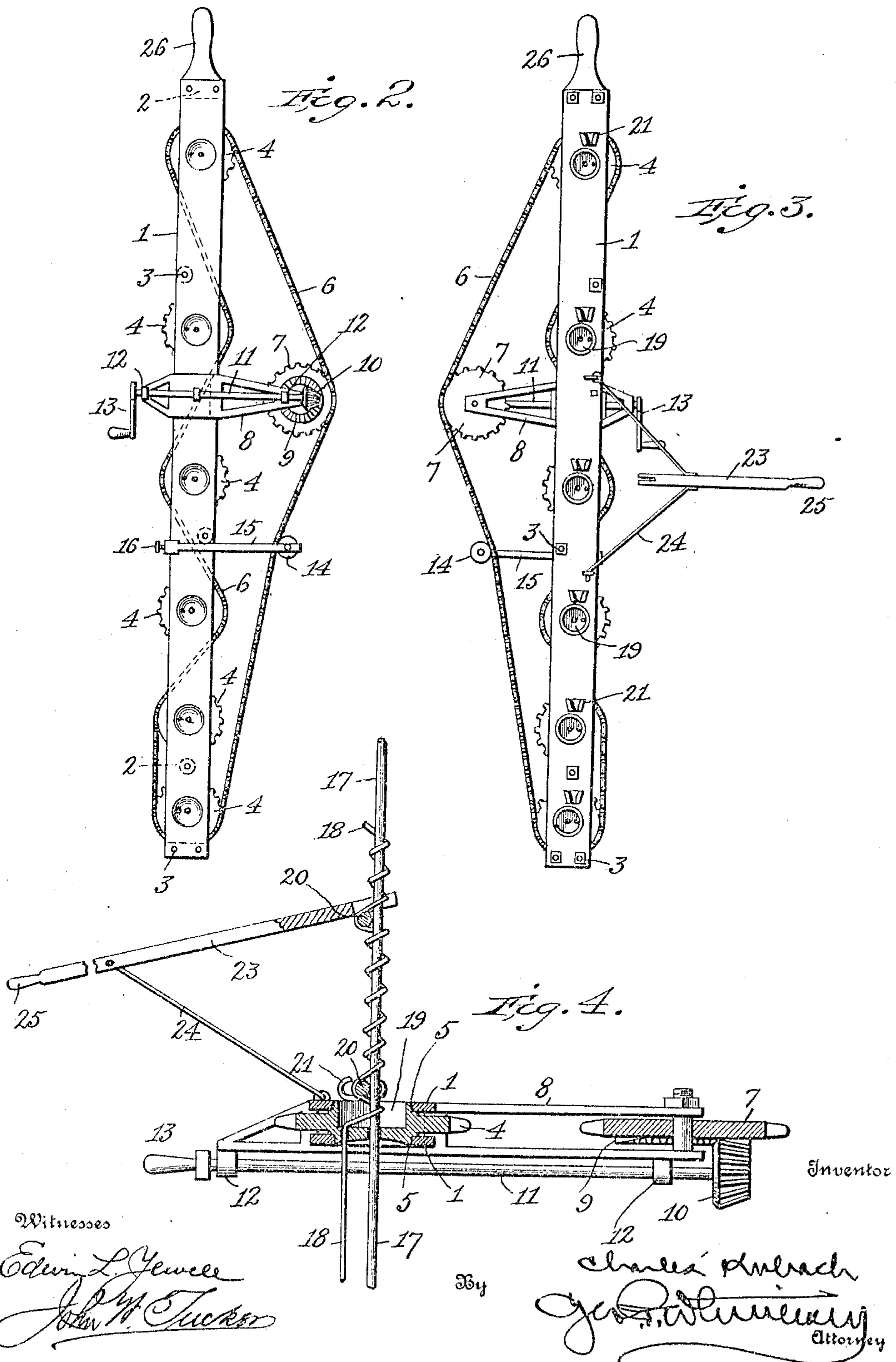
C. KUBACH.
FENCE MACHINE.

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947,470.

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2 SHEETS—SHEET 2.



UNITED STATES PATENT OFFICE.

CHARLES KUBACH, OF ABILENE, KANSAS.

FENCE-MACHINE.

947,470.

Specification of Letters Patent.

Patented Jan. 25, 1910.

Application filed April 22, 1909. Serial No. 491,631.

To all whom it may concern:

Be it known that I, CHARLES KUBACH, a citizen of the United States, residing at Abilene, in the county of Dickinson and State of Kansas, have invented new and useful Improvements in Fence-Machines, of which the following is a specification.

This invention relates to machines for making wire fence composed of longitudinal parallel wires, upright pickets, and a fastening wire or lashing wrapped around the fence wire and the picket at every intersection of the same.

The machine is a portable one, and is intended for building fences in the field; after the fence wires have been stretched along the posts. In this class of machines, the machine is slid along the fence wires, and the pickets are dropped in behind it one after the other and lashed to the fence wires by the operation of the machine.

In machines heretofore used by me I have found great difficulty in holding a wire picket up in place while weaving or wrapping the fastening-wire, because there must be about half an inch of space between the picket and the face of the wheel which effects the wrapping. For this reason, two men are usually required to build an all-wire fence, one to hold the pickets and the other to work the machine.

By my improvement I am enabled to dispense with the man who holds the pickets, and cause the machine itself to do the holding. This is accomplished by recessing the wrapping wheels, so that when the frame of the machine lies up against the picket, there is still a space of about half an inch between the picket and the inner surface of the recess, which is the working face of the wheel. The picket rests in guides, and a lever enables the operator to pull the machine and picket snugly up against the last twist in the wire. Moreover, this construction enables me to provide a bearing for the wheel on each side of its working face, which renders the machine easier to operate. The machine is so geared that the crank handle revolves in a plane parallel with the fence. There is also provided an idler to take the slack out of the chain.

In the accompanying drawings, Figure 1 is a perspective view showing the machine applied to a fence which is in process of construction. Fig. 2 is a front elevation, using the word "front" with respect to the direc-

tion in which the machine is moved along the fence. Fig. 3 is a rear elevation. Fig. 4 is a horizontal cross section on a larger scale, taken through the driving gear, and, Fig. 5 is a perspective view of one of the guides for the pickets.

The frame consists of two parallel metal plates 1, separated by spacing blocks 2 and held together by bolts 3. In these plates I form a plurality of cylindrical openings to serve as bearings for the sprocket wheels 4, which have cylindrical hubs 5 on each side journaled in said bearings. The sprocket wheels are engaged by an endless chain belt 6 which passes back and forth around them in a zig-zag fashion, as shown, and engages also with a driving sprocket 7 journaled at the end of a bracket 8 which is fastened to the main frame at some suitable point. The driving sprocket is provided with a bevel gear 9 which meshes with a bevel pinion 10 secured on the end of a shaft 11 which is journaled in suitable bearings 12 on the bracket and is provided with a crank handle 13.

When the machine is applied to the fence, the driving sprocket is back of the fence and the crank handle is in front thereof, in a position to be grasped by the operator. The rotation of the handle causes all the sprocket wheels 4 to be revolved, some in one direction and the rest in the opposite direction, owing to the zig-zag arrangement of the chain. Any slack in the chain can be taken up by the idler 14 carried on a bar 15 which can be adjusted by the set screw 16.

Each wheel has a central hole adapted to permit the easy passage of one of the fence wires 17, and a second hole at one side of the center to receive the smaller wrapping or lashing wire 18. The rear of each wheel is recessed, said recess 19 being preferably circular and concentric with the axis of rotation of the wheel, and extending into the rear hub a sufficient distance to give a space between the bottom of said recess, or in other words, the working face of the wheel, and the picket 20 when said picket lies close against the end of the hub. This space affords room for the wrapping of the lashing wire to take place, as clearly shown in Fig. 4.

Adjacent to two or more of the wheels is a guide 21 consisting of a frusto-conical sheet metal tube having a vertical slot 22 in its rear side. When the holes for the lashing wire are at the extreme right as shown in

Fig. 3, these guides are in line with the space between the fence wire and the lashing wire—what might be termed the “shed”, to borrow a term from the textile art. The result is that when a picket is dropped down through said guides it goes into place between the fence wire and the lashing wire, ready for the latter to be wrapped around said picket and the fence wire when the wheel is rotated.

In order to enable the operator to keep the machine pressed up against the picket and the latter pressed firmly into the angle of the “shed” between the two wires, I provide the lever 23 connected with the frame 1 by a bail 24 in the end of which said lever is fulcrumed. One end of the lever has a handle 25 and the other end is forked to enable it to straddle a fence wire and bear against the last picket which was fastened in place. By means of this lever, the machine can be held rigidly up to its work.

The upper space block 2 may be extended and formed into a handle 26 to facilitate the moving of the machine along the fence wires. The bottom of the frame is not furnished with a foot, in order to enable it to be used more easily on uneven ground.

The machine shown is constructed to build

a six-strand fence, but it is evident that the number of wrapping wheels may be varied, and the machine otherwise modified within the scope of my invention to meet various requirements.

Having thus described my invention, what I claim is:

A portable machine for building wire fence, having a plurality of wrapping wheels, each provided with sprocket teeth and hubs extending on each side, the rear hub being recessed, a frame having bearings for said hubs and flush with the outer ends thereof, a ball hinged to said frame, a lever fulcrumed in said bail and having a forked end to engage with a picket, tapering tubular guides open along the middle and arranged adjacent to wrapping wheels on the rear side of the frame, and a transverse shaft geared to said sprocket wheels and having a crank handle at its front end adjacent to the handle of the lever.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES KUBACH.

Witnesses:

THADDEUS C. COLE,
J. SHELBY MORGAN.