

O. D. ALSPACH.
GEARING.
APPLICATION FILED MAY 18, 1911.

1,053,692.

Patented Feb. 18, 1913.
2 SHEETS—SHEET 1.

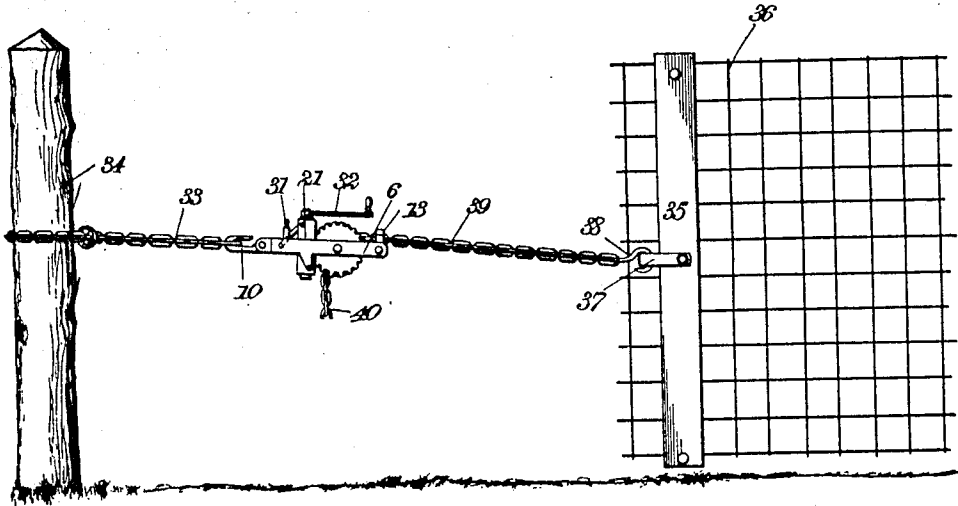


Fig. 1.

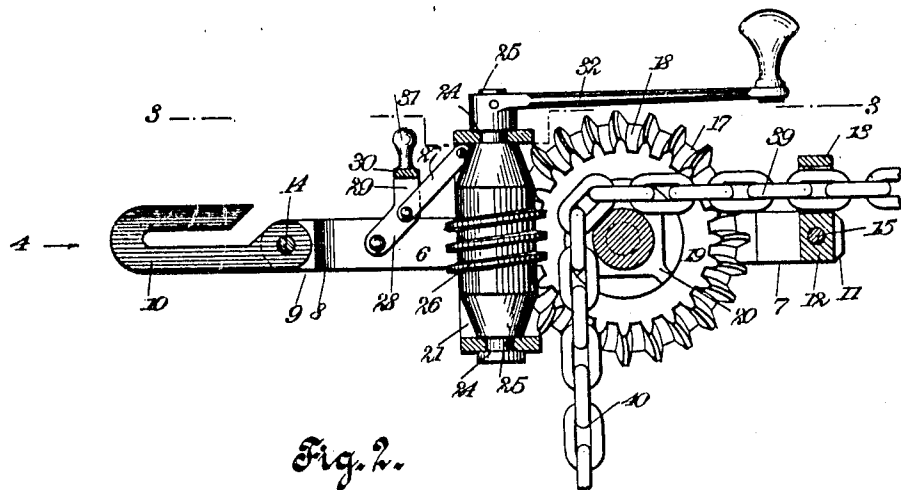


Fig. 2.

WITNESSES:
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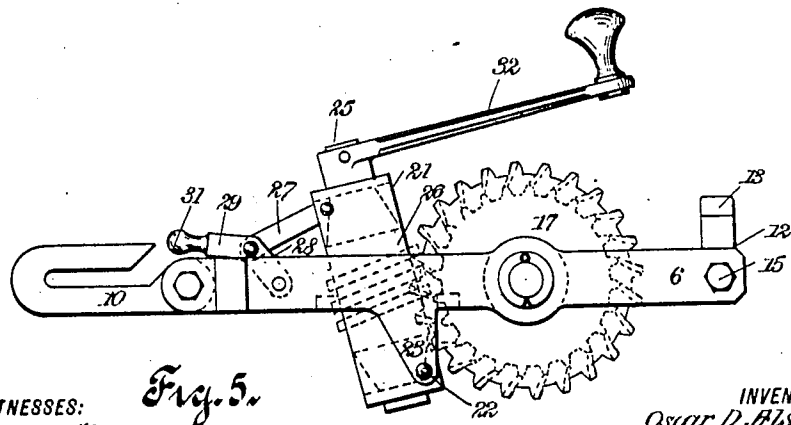
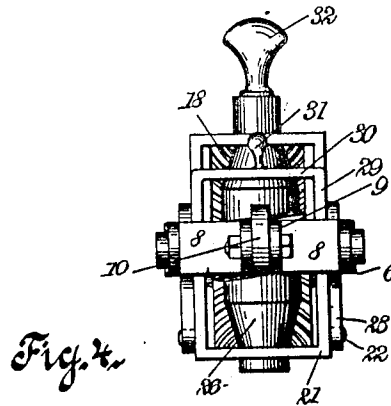
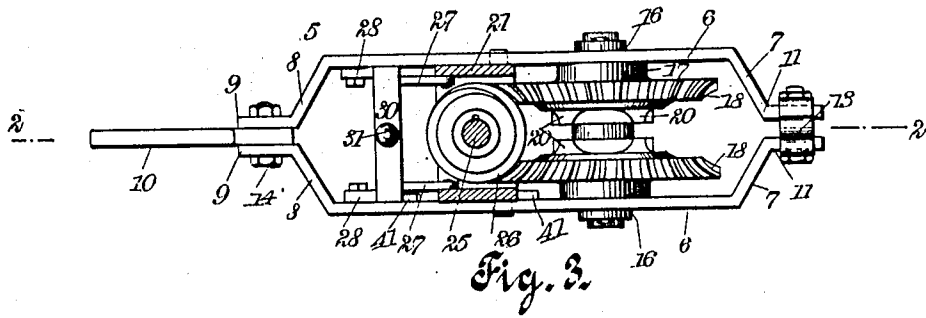
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2 SHEETS—SHEET 2.



WITNESSES:
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UNITED STATES PATENT OFFICE.

OSCAR DALE ALSPACH, OF LANCASTER, OHIO, ASSIGNOR OF ONE-HALF TO JOSEPH H. GOLDCAMP, OF LANCASTER, OHIO.

GEARING.

1,053,692.

Specification of Letters Patent.

Patented Feb. 18, 1913.

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To all whom it may concern:

Be it known that I, OSCAR D. ALSPACH, a citizen of the United States, and a resident of Lancaster, in the county of Fairfield and State of Ohio, have invented a new and Improved Gearing, of which the following is a full, clear, and exact description.

My invention relates to gearing, and it has for its object to provide one having wheels with gearing for pulling taut a rope or chain secured to the fence, there being a bearing movable relatively to the wheel in which a gear wheel is journaled for meshing with the first-mentioned gearing, so that the first-mentioned wheels may be rotated by the said gear wheel when the bearing is in normal position, and the first-mentioned wheels may be rotated freely independently of the gear wheel when the bearing is moved away from the first-mentioned wheels.

Additional objects of the invention will appear in the following complete specification, in which the preferred form of the invention is disclosed.

In the drawings similar characters of reference indicate corresponding parts in all the views, in which—

Figure 1 is a view showing my fence tightener in use; Fig. 2 is a sectional view on the line 2—2 of Fig. 3; Fig. 3 is a sectional view on the line 3—3 of Fig. 2; Fig. 4 is an end view of my fence tightener; Fig. 5 is a side elevation of my device.

By referring to the drawings it will be seen that the frame 5 is composed of two side members 6, which have converging ends 7 and 8, the converging ends 8 having terminals 9 disposed one at each side of the hook member 10, and the converging ends 7 having terminals 11 disposed one at each side of the terminals 12 of the eye member 13. The terminals 9 on the hook member 10 are held in place by the bolt 14, and the terminals 11 and 12 of the eye member 13 are held in place by the bolt 15. Disposed between the side members 6, and journaled in bearings 16, in the side members, there is a wheel 17, having two sets of gear teeth 18, spaced from each other, there being an opening 19 around the periphery of the wheel 17, between the two sets of gear teeth 18, the wheel 17 having shoulders 20, which project in the said opening 19. Disposed between the side members 16, there is a rectangular frame

21, the said rectangular frame 21 being pivoted at 22 to the depending portions 23 of the sides 6 of the main frame. This rectangular frame 21 has bearings 24 in which is journaled a shaft 25, to which a worm wheel 26 is keyed, said worm wheel 26 being adapted to engage the two sets of gear teeth 18. Pivoted at each side of the rectangular frame 21 there are links 27, these links 27 being pivoted to the links 28, which are in turn pivoted to the sides 6 of the frame 5. The links 28 have upwardly extending arms 29, and are connected by a cross member 30 having a handle 31. It will therefore be seen that the links 27 and 28 with the arms 29 and the handle, form a toggle joint, for holding the rectangular frame 21 in position with the worm wheel 26 engaging the two sets of gear teeth 18. To the top of the shaft 25 beyond the rectangular frame 21, there is secured a crank 32.

In using the invention a chain 33 is secured to the hook 10, this chain 33 being disposed around a post 34. Clamps 35 are then disposed one at each side of the end of the fence 36, and they are bolted together so that they will draw the fence 36 evenly in the direction of the said post 34. To the clamps 35 there is secured a clevis 37, which is engaged by a hook 38 on a chain 39. This chain 39 is disposed around the recess 19 of the wheel 17, so that it may be engaged by the shoulders 20; the rectangular frame 21 is then moved by means of the handle 31 so that the worm wheel 26 will be disengaged from the two sets of gear teeth 18. This having been done the terminal 40 of the chain 39 is pulled downwardly until the slack is taken up, when the rectangular frame 21 is moved into normal position with the worm wheel 26 engaging the two sets of gear teeth 18. The fence 36 is then stretched, and drawn into position by turning the shaft 25 by means of the crank 32, which rotates the worm wheel 26, and the wheel 17. As the shoulders 20 prevent the links of the chain 39 from slipping relatively to the wheel 17, it will be seen that as the shaft 25 is rotated, by means of the crank 32, the fence will be stretched into position.

Stops 41 are secured to one of the sides 6 of the frame 5 for limiting the movement of the rectangular frame 21.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a gearing, a frame, a wheel mounted to rotate on the frame, the wheel being provided with two sets of gear teeth spaced apart, a shoulder between the two sets of gear teeth and extending radially, a second frame having a bearing and pivoted to the first-mentioned frame, a shaft journaled in the bearing and gearing thereon normally meshing with both sets of teeth, and means for holding the second frame in a predetermined position relatively to the first-mentioned frame.

2. In a gearing, a frame having the sides spaced apart, a wheel having teeth disposed between the sides to which the wheel is journaled, a second frame having a bearing and disposed between and pivoted to the sides of the first-mentioned frame, a shaft journaled in the bearing and a gear thereon normally meshing the teeth, a crank secured to the shaft, arms pivoted to the first-mentioned frame and having a handle, and arms pivoted to the second-mentioned frame and to the first-mentioned arms between their pivoted points and their handle.

3. In a gearing a bearing, a wheel journaled in the bearing having an opening around its periphery, the wheel being provided with two sets of gear teeth spaced apart and projecting into the opening, with

shoulders between the two sets of gear teeth and extending radially, and a second wheel for engaging both sets of gear teeth.

4. In a gearing a bearing, a wheel journaled in the bearing, the wheel being provided with two sets of gear teeth spaced apart, and a shoulder between the two sets of gear teeth, and extending radially, and a second gear wheel for engaging both sets of gear teeth.

5. In a gearing a frame with sides spaced apart, a wheel journaled in the bearing and having two sets of gear teeth spaced apart, shoulders on the wheel between the two sets of gear teeth, a second frame having a bearing and disposed between and pivoted to the sides of the first-mentioned frame, a shaft journaled in the bearing in the second-mentioned frame, and having gearing normally meshing with the two sets of gear teeth, a crank secured to the shaft, arms pivoted to the sides of the first-mentioned frame, arms pivoted to the second-mentioned frame and to the first-mentioned arms, and a stop for limiting the movement of the first-mentioned frame.

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

OSCAR DALE ALSPACH.

Witnesses:

MILES SANDS,
J. L. ALSPACH.