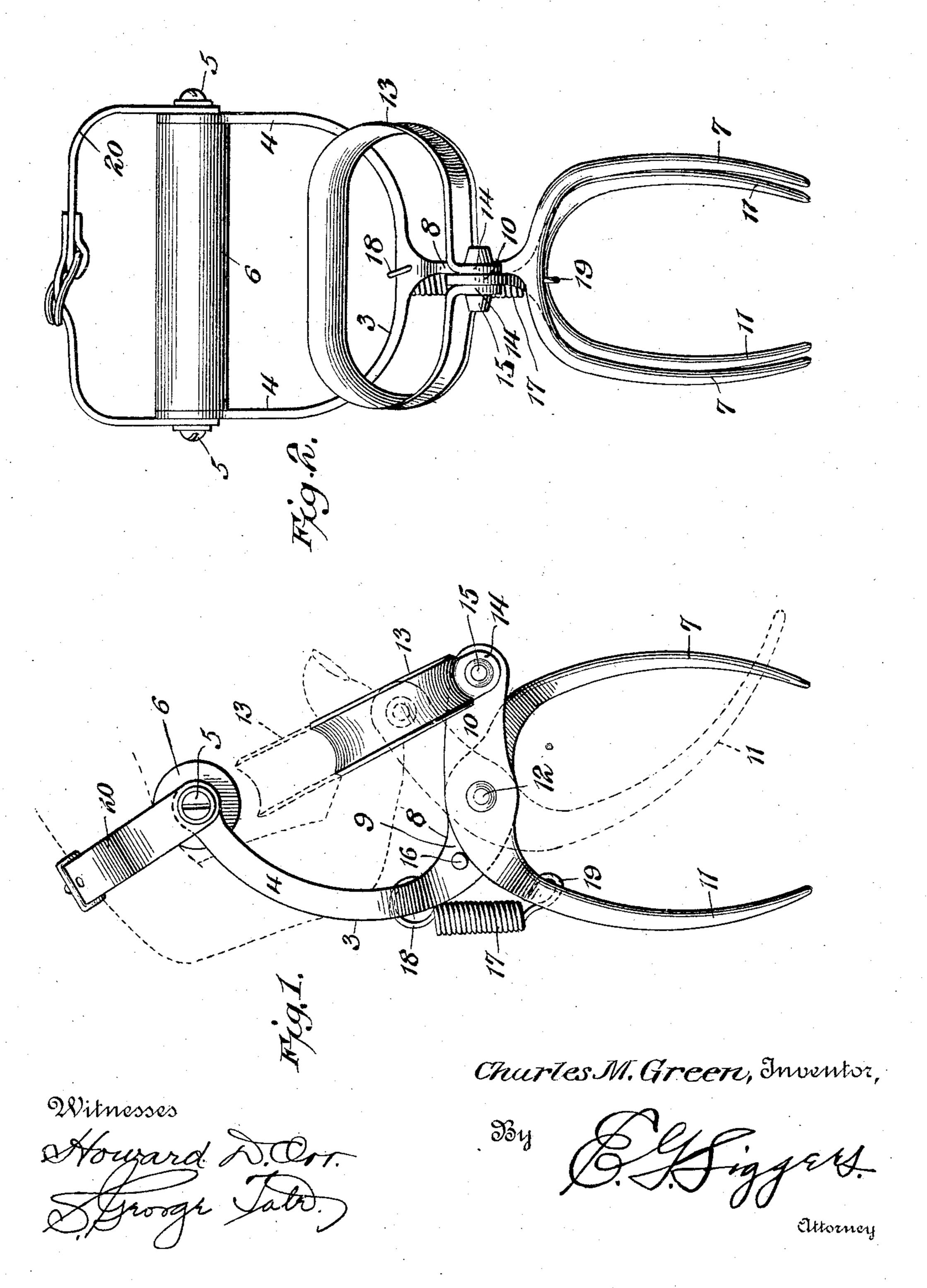
## C. M. GREEN. GRAIN FORK. APPLICATION FILED JUNE 28, 1909.

966,197.

Patented Aug. 2, 1910.



THE NORRIS PETERS CO., WASHINGTON, D.

## UNITED STATES PATENT OFFICE.

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## GRAIN-FORK.

966,197.

Specification of Letters Patent.

Patented Aug. 2, 1910.

Application filed June 28, 1909. Serial No. 504,922.

To all whom it may concern:

Be it known that I, Charles M. Green, citizen of the United States, residing at Grand Forks, in the county of Grand Forks and State of North Dakota, have invented a new and useful Grain-Fork, of which the following is a specification.

This invention relates to an improvement in grain forks, and is especially applicable for use in shocking bundles of grain. Heretofore, bundles of grain, which have been dropped on the field by a harvesting machine, have been picked up by hand and carried to different points on the field and put in shocks. This work is very tedious on account of the necessity of stooping over and lifting each bundle in the arms and then carrying the same.

The principal object of this invention is to provide a grain fork which will materially assist an operator in this class of work.

A further object of this invention is to provide an implement of the class described, which is adapted to be carried in the hand, and is provided with suitable means for tightly gripping a bundle and carrying the same to the place desired.

A still further object of the invention is to provide an implement which is simple in 30 construction, easy of manipulation, and

cheap to manufacture.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims here to appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a side elevation of the implement, and Fig. 2 is a front

elevation of the same.

Like reference numerals designate corresponding parts in all the figures of the

drawing.

The invention comprises a relatively stationary member 3 which preferably describes a compound curve, one end being bifurcated to form spaced arms 4-4, between the free ends of which is secured, by means of screws 5-5 or other suitable means, a

handle 6. The other end of the said member 3 is bifurcated to form spaced and inwardly curved prongs 7—7 constituting a fork. These prongs are preferably arranged in the same plane as the bifurcated arms 4 60 of the handle. Arranged between, and connecting the handle to the prongs, is an intermediate portion or neck 8 which is provided with flat sides 9 employed for a purpose hereinafter described.

hereinafter described. The invention further comprises a curved member having one end 10 thereof formed flat, and the other end bifurcated to form spaced and inwardly curved prongs 11—11 which are spaced closer together than the 70 prongs of the other member. This member is pivoted to the relatively fixed member by a pivot 12 of any suitable construction, and in such a relation that the flat portion 10 of the curved member bears against the 75 flat or intermediate portion 8 of the relatively fixed member, and also in such a way that the said members are crossed. The end 10 of the pivoted member is arranged to extend beyond the pivot a short distance to 80 form a lever. Pivoted to the extreme end of the flat portion or lever 10 of the curved pivoted member, is an elliptical-shaped or looped finger-piece 13. This finger-piece is curved in cross section and preferably 85 formed from a single piece of metal, the free ends 14 thereof being bent outwardly to form bearing surfaces. A bearing pin 15 is arranged to extend through the said free ends 14 and the end of the lever 10. A stop 90 16 is formed on the flat portion 8 of the relatively fixed member for limiting the outward movement of the said prongs or forks. A coiled spring 17 is employed for normally holding the fork in an open posi- 95 tion, and has one of its free ends 18 preferably secured to the stationary member and the other free end 19 secured to the curved member. It will be noted that the fingerpiece terminates short of the handle so that 190 one hand may grasp both the handle and the finger-piece and manipulate the latter to close the forks.

The invention further comprises an adjustable strap 20 having its ends preferably 105 secured to the handle by the fastening means 5.

In operation, the implement is positioned in the hand, as clearly shown in Fig. 1 of the drawing, with the strap 20 over the 110

hand and the fingers grasping the fingerpiece. The prongs or forks are inserted into a bundle of grain lying on the ground, and the finger-piece 13 pulled upon, this movement causing the prongs 11 of the curved member to pass across and between the prongs 7 of the relatively fixed member and thereby firmly hold the bundle of grain. The bundle can then be carried by the fork 10 to any suitable place where the shock is being formed; and when desirous of releasing the bundle, the finger-piece 13 is first released, and the coiled spring 17 will immediately bring the curved member back into its normal and open position, and thereby readily permit the withdrawal of the im-

plement, and causing the bundle to drop. The device has been tested and shown to save about seven inches of stooping in each 20 operation, with the result that a person will pick up fully one-third more bundles with

the implement than by hand.

What I claim is:—

1. A hand-operated grain fork comprising 25 a pair of crossed pivoted fork members, means connecting the members for holding them normally in an open position, a handle formed on one of the members, and a fingerpiece secured solely to the other member, 30 said handle and finger-piece being grasped by one hand and serving to close the forks of said members.

2. A hand-operated grain fork comprising a pair of crossed pivoted members, each 35 member having a forked end, the fork of one member being wider than the fork of the other member, and means connected to the members for permitting the implement to be grasped by one hand and operated there-40 by to close the forks, the fork of one member fitting between and crossing the fork of the other member.

3. A hand-operated grain fork comprising a pair of crossed pivoted members, each 45 member having an inwardly curved forked end, the fork of one member being wider than the fork of the other member, means connected to each of the members for holding the forks in a normally open position, 50 and means connected to the members for permitting the implement to be grasped by one hand and operated thereby to close the forks, the fork of one member fitting between and crossing the fork of the other 55 member.

4. A grain fork comprising a pair of crossed fork members, each member comprising a plurality of prongs having pointed free ends which are arranged in longitudinal 60 alinement therewith, one of the members being relatively stationary and provided with a handle, the other member being pivoted on the first member between the handle and the fork and provided at its free end with a 65 finger-piece, said finger-piece being spaced l from the handle and in such relation thereto that one hand can grasp both the handle and

finger-piece and operate the latter.

5. A grain fork comprising a pair of crossed pivoted fork members, one of the 70 members being relatively stationary and provided with a handle, the other member pivoted on the first-named member and having a short extension forming a lever, a finger-piece secured solely to the lever and 75 terminating short of the handle, so as to be grasped by the fingers while the hand embraces the handle to close the forks of said members.

6. A grain fork comprising a pair of 80 crossed fork members, one of the members being relatively stationary and provided with a handle, said handle and fork describing a compound curve, the other member pivoted on the first-named member between 85 the curved portions and having a short extension forming a lever, a finger-piece pivoted on the lever and terminating short of the handle so as to be grasped by the fingers while the hand embraces the handle to close 90 the forks of said members, and means for normally holding the forks of the members

apart.

7. A grain fork comprising a pair of crossed pivoted members, one of the mem- 95 bers being provided at one end with spaced and inwardly curved prongs constituting a fork, and at the other end with oppositely curved and spaced arms for receiving a handle, and a connecting portion between the 100 fork and the arms, a second member comprising spaced and inwardly curved prongs constituting a fork and provided with an extension, said extension being pivoted to the connecting portion of the first mentioned 105 member and extending beyond the pivot to form a lever, a finger-piece pivoted to the end of the lever and adapted to coöperate with the handle when operating the pivoted member, and a spring for engaging both 110 members for normally holding the forks apart.

8. A grain fork comprising a pair of crossed pivoted members, one of the members being provided at one end with spaced 115 and inwardly curved prongs constituting a fork and at the other end with oppositely curved and spaced arms, a handle arranged between the said arms, an adjustable hand strap secured to the arms and arranged to 120 extend over the handle, and a connecting portion between the fork and the arms, said portion being flat and arranged in a plane at right-angles to the plane of the fork, a second member comprising spaced and in- 125 wardly curved prongs constituting a fork and provided with an extension, said extension being flat and arranged in a plane at right-angles to the forks and pivoted to the connecting portion of the first-mentioned 130

member at an intermediate point, a looped finger-piece pivoted on the end of the said extension, a stop extending from the connecting portion of the first member for lim-5 iting the outward movement of the second member, and a coiled spring connecting the two members for normally holding the forks in an open position.

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In testimony, that I claim the foregoing as my own, I have hereto affixed my signa- 10 ture in the presence of two witnesses.

CHARLES M. GREEN.

Witnesses:

B. G. SKULASON, WINNIFRED COUTTS.