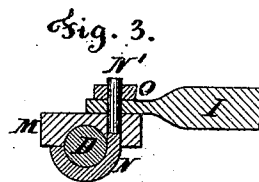
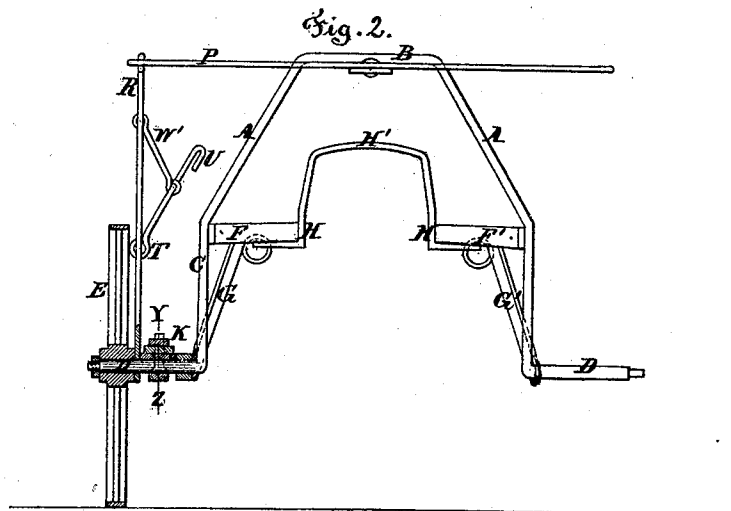
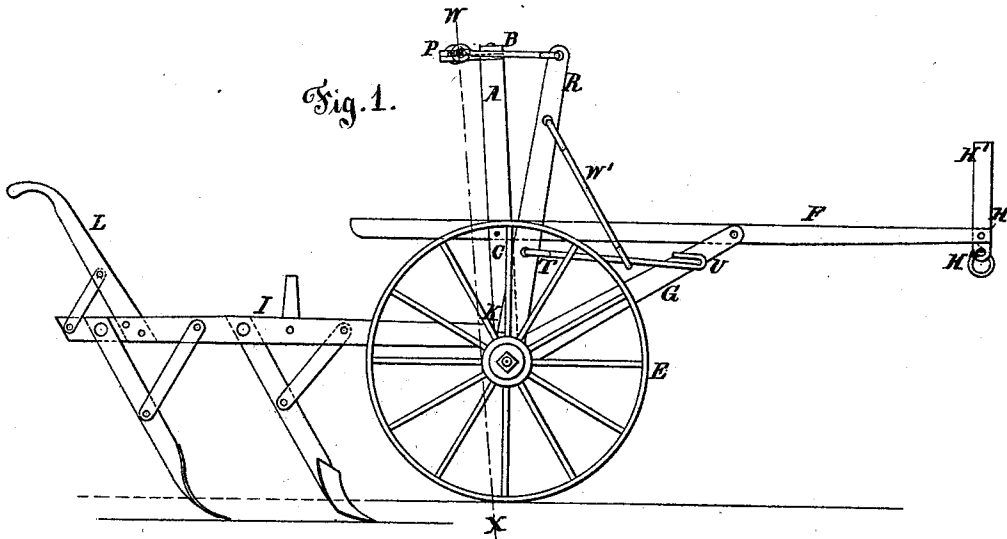


*W. & J. C. French,*

*Corn Plow.*

*No. 109,403.*

*Patented Nov. 22, 1870.*



Witnesses.  
*J. A. Wallace.*

*W. E. Clunkinbeard.*

Inventors.

*William French,*

*James Crawford French,*

*By Samuel Jacob Wallace,*  
*Attorney.*

# UNITED STATES PATENT OFFICE.

WILLIAM FRENCH AND JAMES C. FRENCH, OF KEOKUK, IOWA, ASSIGNORS  
TO WILLIAM FRENCH, OF SAME PLACE.

## IMPROVEMENT IN CORN-PLOWS.

Specification forming part of Letters Patent No. **109,403**, dated November 22, 1870.

*To all whom it may concern:*

Be it known that we, WILLIAM FRENCH and J. C. FRENCH, now of Keokuk, Lee county, State of Iowa, have made a new and useful Improvement in Corn-Plows, of which the following is a specification.

The nature and object of our invention relates to forming a corn-plow of the variety used to operate on both sides of one row of plants at one passage, drawn by two horses abreast, one on each side of the row, and guided by one man walking behind, frame of the plows running upon or supported by a pair of wheels.

Our invention consists of a general arrangement of parts favorable to the purpose, and of a special construction of some of the parts to adapt them to better advantage than otherwise, the whole being constructed mostly of wrought-iron, to give permanency to the structure and enable repairs to be readily made.

Figure 1 is a view showing our improved plow in a side elevation. Fig. 2 is a view showing a part section on line W X as seen from behind, and Fig. 3 is a part section on line Y Z of same.

A is the axle, and forms part of the main frame. It is arched in its center part B, to pass over the row of plants, and has descending sides C C' and horizontal ends D D', on which are mounted wheels, as E, supporting the frame.

The tongue is made double, of parts F F on each side of a row of plants, and not uniting in one, as usual. At the axle A they are fixed to the descending parts C C' with braces G G, and at the fore ends they are fixed to the descending parts of the neck-yoke H, thus using a low tongue and neck-yoke, and passing also over high plants. The neck-yoke H is made arched in its center part H' also, to pass over high plants, while its ends are low to suit the team and bear the front ends of the double tongue F F. The plows are mounted in sets on the beams, as I, to run on each side of a

row of plants. The beams are attached to the axle parts D D, made round, by the hinged part K and its duplicate inside of the wheels. The beams, as I, have handles at their back ends for guiding by, as L. The part K has two hinges in its structure, giving the plows freedom of motion sidewise and vertically. It is formed of part M, resting on part D, formed to turn thereon, and of part N on the under side of D, uniting like a journal-bearing around D and turning on it. The part N extends upward in the form of a bolt through a hole in the rear side of M, to unite and hold the two together. The top part, M, is flat, and on it rests the end of plow-beam I, through a hole in which passes the bolt N', having on top a nut, O, to hold the whole together, and giving a movement of the beam I on bolt N' horizontally and of the part K on part D vertically. The double-tree P rests on an extension back from the arch B of axle A in the center, and is pivoted to turn horizontally. To each of its ends the top ends of levers, as R, are connected by links, as S. The lower ends of the levers, as R, rest on axle at D D, as pivoted inside the wheels. At intermediate points, as at T, there are link-connections, as U, reaching forward for attaching the team. The parts U, &c., are held up by parts, as link W', from the top of levers R, to prevent their getting entangled in the wheels.

The whole is substantially made of mostly wrought-iron and may have its parts modified or repaired when desired.

We claim—

In a corn-plow, the arrangement of the axle-tree A B, shafts F F, yoke H H', vibrating bars R, evener P, draft-rod U, and brace-rod W', as specified.

WILLIAM FRENCH.

JAMES CRAWFORD FRENCH.

Witnesses:

SAMUEL JACOB WALLACE,  
EDWD. MUMM.