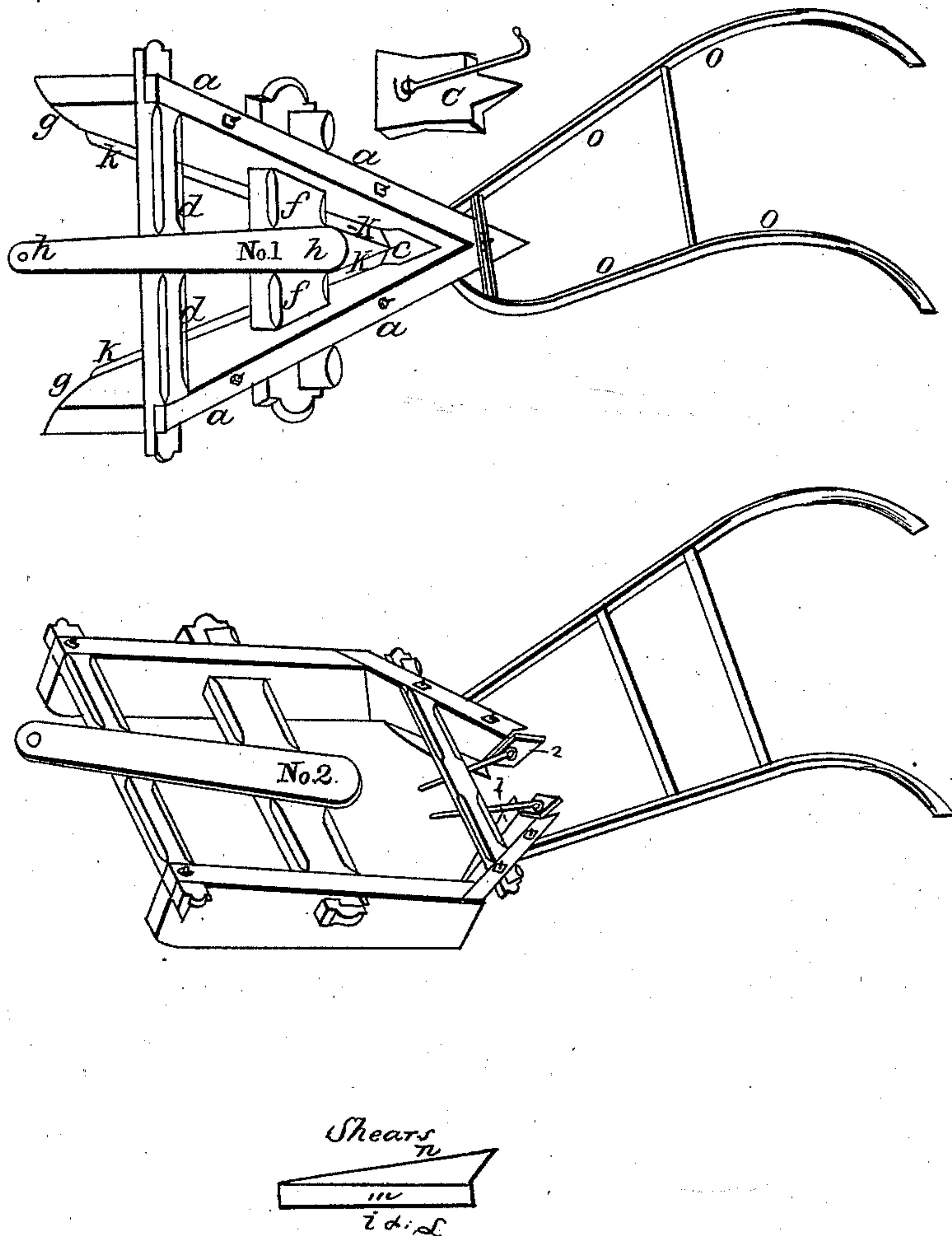


S. MALLORY.

Ditching Plow.

No. 3,198.

Patented July 24. 1843.



Witnesses.

Horace W. Loper
Letha Wakeman

Inventor.

Samuel L. Mallory

UNITED STATES PATENT OFFICE.

SAMUEL MALLORY, OF ALEXANDER, NEW YORK.

RUT-SHEARS FOR REPAIRING AND IMPROVING ROADS.

Specification of Letters Patent No. 3,198, dated July 26, 1843.

To all whom it may concern:

Be it known that I, SAMUEL MALLORY, of Alexander, in the county of Genesee and State of New York, have invented a new and useful Machine for Repairing and Improving Roads, known by the name of "Mallory's Rut-Shears;" and I do hereby declare that the following is a full and exact description.

10 The frame is made with two pieces of oak or other suitable planks each 3 inches thick, $3\frac{1}{2}$ ft. long and about 15 inches wide with one end of each cut to a bevel and fitted and fastened together with pins or
15 otherwise, so that the two pieces of plank shall form the sides of the machine, which is triangular. The sides are represented in the drawings by letter A. An aperture, letter C, is cut out of the lower part of the
20 bevel joint from the bottom, 8 inches high and 8 inches wide at the bottom, and 10 inches wide at the top, with a wooden gate letter E, to fit the same which is fastened with an iron rod or rods, by hook and
25 staples to the rear part of the beam, which gate may be removed at pleasure.

A cross beam about $2\frac{1}{2}$ ft. long, is framed into the top of the two sides at the front or across the open end of the triangular machine, lettered *d*. One foot in rear of this
30 cross beam is another framed into, and $2\frac{1}{2}$ inches below the top of the sides with tenons, which is lettered *f*. The lower front corners of the two sides are rounded. The
35 draft-beam is 3 ft. long fastened upon the two cross beams lettered *h*, on a center line between the sides.

The shears, lettered *i*, are made of cast iron or wrought iron laid with steel, and
40 the horizontal or flat part, about 2 in. wide, is fastened to the bottom of the sides with bolts, and extend back to the aperture. They are 18 inches long, and from $\frac{1}{2}$ to 1 inch thick on the flat part. The wings of the
45 shears lettered K, project inward from the sides, the projection commencing at the front end, and increasing gradually toward the rear, where the width of the wings of each side will both be from 2, to 4 inches
50 less than the width of the aperture, or about 4 inches each. These wings project or fall

downward at an angle of 18 degrees, and are gradually brought to an edge on the lower side. The shears are represented by a separate view, lettered *i* and *l*. The flat part
55 which is attached to the sides is lettered *m*, and the wings lettered *n*.

The handles, lettered O, are about four feet long, and like those of a common plow.

Drawing No. 2, represents another method
60 of making the sides of the machine which run parallel with the draft-beam, about two feet from the front end and then incline inward at an angle of about 45 degrees which
angular part is 18 inches long, and to which
65 angle there is an additional crossbeam. The angular part in the rear is not joined together, but left open, and about 1 foot apart, which aperture is closed at pleasure, by two
70 gates hung by hinges on each side of the opening, and folding inward when closed. They may be fastened with two bars of iron with hooks and staples, and attached to or connected with the cross beam.

The machine in either form, is used by
75 attaching a team, usually one pair of horses, to the draft-beam by a common clevis, for the purpose of leveling the roads by cutting the combs of the ruts and gathering the loosened earth into the cavity, and by fill-
80 ing the deep cuts with earth that may be gathered and retained by closing the aperture. The advantage derived from it is the despatch and excellence with which the
work is done. One man and team is suffi-
85 cient to operate with the machine, which may be made larger or smaller to suit the condition of the roads on which it is to be used; and it may also be used as a common
90 scraper.

What I claim as my invention and desire to secure by Letters Patent is—

Attaching the shears to the inclined sides of the frame, having an opening at the rear for the escape of the earth, &c. and which
95 can be closed with a gate for the purpose specified, all as herein described.

SAMUEL MALLORY.

Signed in presence of:

RICHARD SMITH,
H. W. SOPER.