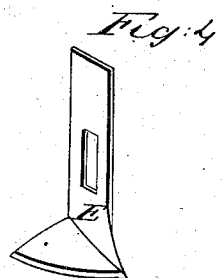
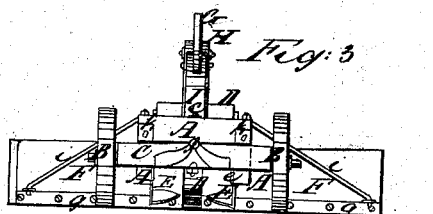
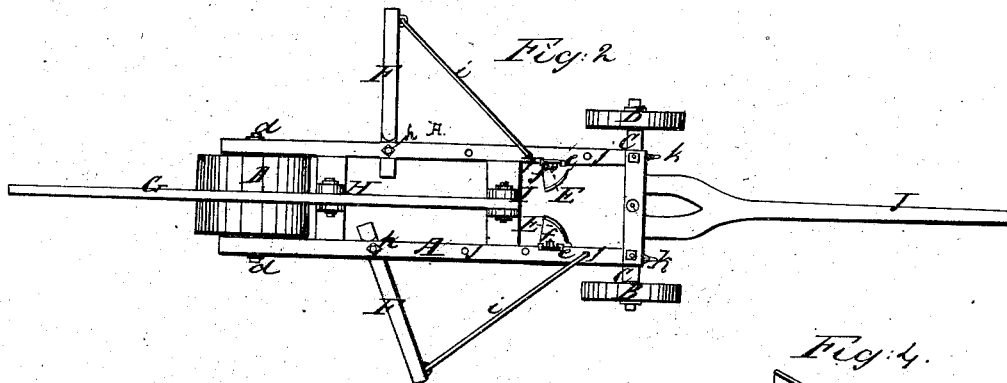
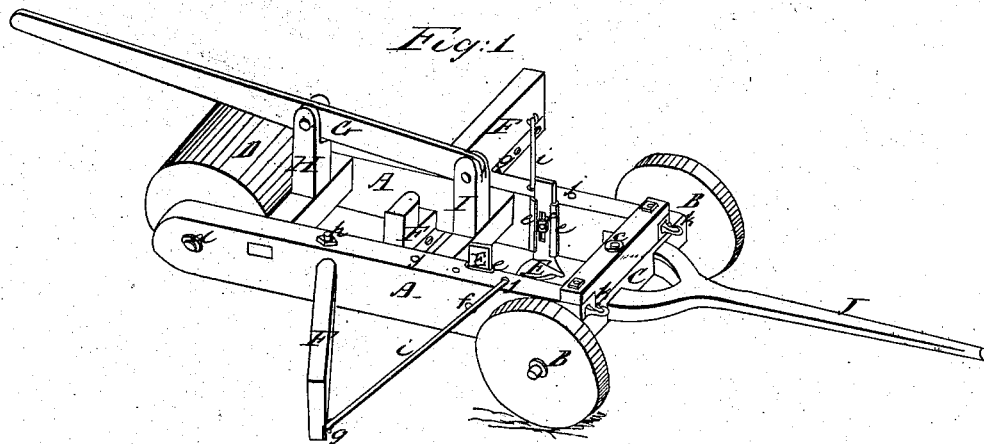


N. Potter,
Rut Scraper,
No 7,462, Patented June 25, 1850.



UNITED STATES PATENT OFFICE.

NATHANIEL POTTER, OF EAST HAMBURG, NEW YORK.

MACHINE FOR REPAIRING ROADS.

Specification of Letters Patent No. 7,462, dated June 25, 1850.

To all whom it may concern:

Be it known that I, NATHANIEL POTTER, of East Hamburg, in the county of Erie and State of New York, have invented a new and useful Improvement in Machines for Improving and Repairing Roads, which I call a "Rut-Scraper"; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a general view of my machine. Fig. 2, is a plan or bird's eye view of the same. Fig. 3, is a front view. Fig. 4, represents one of the cutters.

Similar letters refer to corresponding parts in the several figures.

The nature of my invention consists in a frame or carriage of timber of suitable strength and form supported at its front end on a pair of wheels which are mounted on a leading axle attached to the frame or carriage by a king bolt and supported at its back end by a broad roller extending across the entire width of the carriage and having its axis working in suitable bushes or bearings in the frame or carriage. The said frame or carriage is provided near its front end with a pair of cutters nearly of the form of a quadrant which are fixed in nearly a horizontal position on a level with or at any required height above or below the track of the leading wheels. The said cutters are for the purpose of cutting off the ridges of dirt at the sides of ruts formed in roads and have a tendency to throw the earth so cut off into the rut. The frame or carriage is further provided with a pair of vertical scrapers turning on centers and adjustable at any required angle to the center of the frame for the purpose of scraping the dirt from the road and throwing or leaving it in any direction either into ruts or toward the center of the road.

The broad roller at the back end of the frame is for the purpose of rolling or compressing the road after the ruts are filled, pressure being given to the roller by a lever which is held by the operator.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

A A represent the frame consisting of two

longitudinal bars of timber held together by transverse struts or braces.

B B are the leading wheels.

C is the leading axle attached by the king bolt to the frame A, A.

D is a heavy roller which may be of iron or wood—it is provided with axes *d d* fitted in suitable bushes or bearings in the frame A A.

E, E are cutters the blades of which are formed nearly of quadrant shape and are provided with vertical stocks sliding in grooved plates *e, e* on the inner sides of the longitudinal bars of the frame A A and are attached by bolts *f f* which pass through the frame and through slots in the vertical stocks of the cutters and are secured by nuts the said slots allowing the cutters to be adjusted to any required height. The cutter blades are nearly at right angles to the vertical stocks that is nearly horizontal, the curved or cutting edge being inclined slightly downward toward the center of the frame.

F, F, are the scrapers for removing the loose dirt from the surface of the road. They are formed of planks of timber of any suitable length and thickness set vertically on edge and shod on their lower front or cutting edges with plates of iron or steel *g, g*. These scrapers F, F, are attached to the frame A, A, by vertical pins on which they turn freely so as to be adjusted at any required angle to the center of the frame and are kept in the required position by iron rods or braces *i, i*, which are attached to their front sides and have their ends bent so as to catch in holes *j, j*, on the upper edges of the longitudinal bars of the frame. The scrapers F, F may be of equal or of different lengths and set both having their outer ends thrown forward or one forward and the other backward according to the direction in which it is required to leave the dirt.

G, is the pressure bar or lever which may be of wood or metal and is attached by pins to the posts H and I on the frame.

J is the tongue or pole attached to the leading axle C, and *k, k*, are hooks for attaching horses or other drawing power.

The operation is as follows—The horses or other drawing power being attached and set in motion, and the machine brought with

its center over a rut in the road the cutters E, E will cut off the ridges on each side of the rut and having their cutting edges inclined downward toward the center of the frame will throw the dirt cut from the ridges into the hollow of the rut—the scrapers F, F, throwing or conducting the dirt from the surface of the road either into or toward the rut or toward the center of the road as may be required. The roller D will pass over the loose dirt which has been thrown into the ruts and make it firm and solid, extra pressure may be given to the roller D, if required, by hanging a weight on the lever G, or by the hand of the operator.

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

Hanging the cutters E, E, for cutting off the ridges at the sides of the ruts; the scrapers F, F, for scraping the dirt into the ruts, and the rollers D for pressing and smoothing the road upon the same frame; all the said parts operating together in the manner and for the purposes substantially as herein set forth.

NATHANIEL POTTER.

Witnesses:

O. D. MUNN,
CHAS. F. INNESS.