(No Model.)

R. H. LOVE.

MACHINE FOR DRESSING SURFACES OF PAVEMENTS.

No. 462,264. Patented Nov. 3, 1891.

Fig. 1.

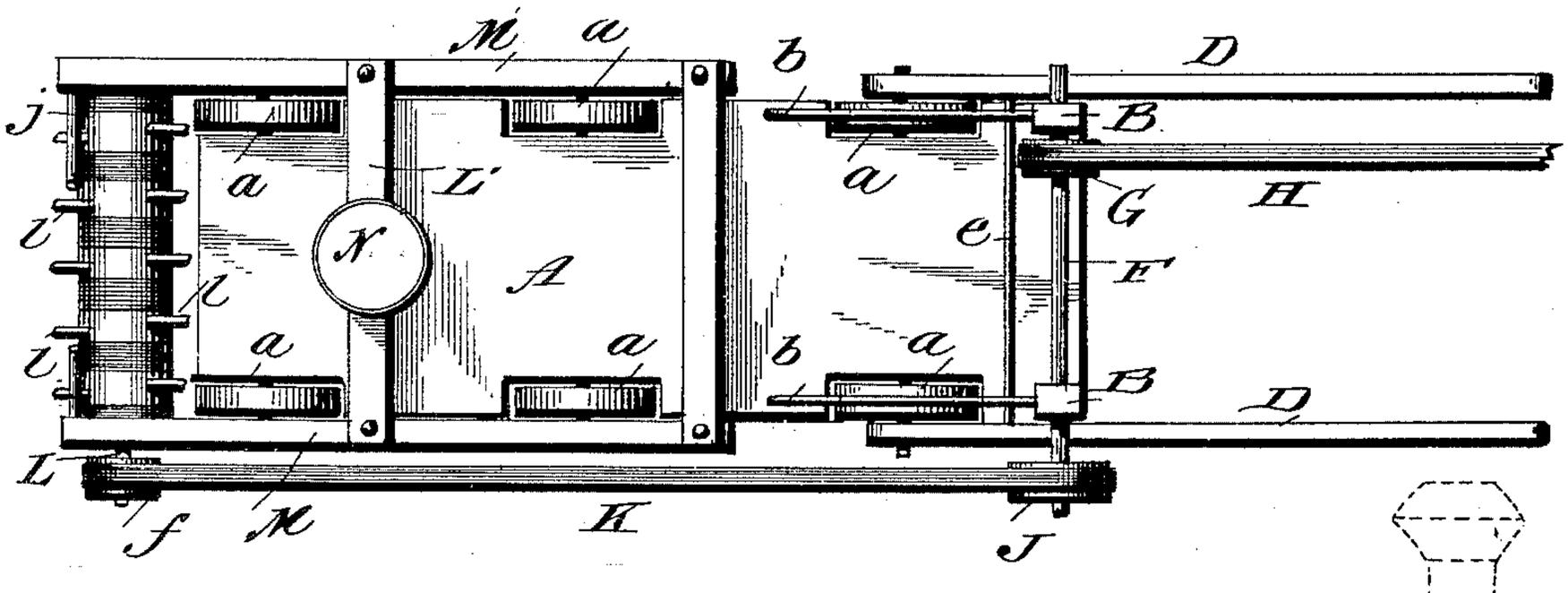


Fig. 2.

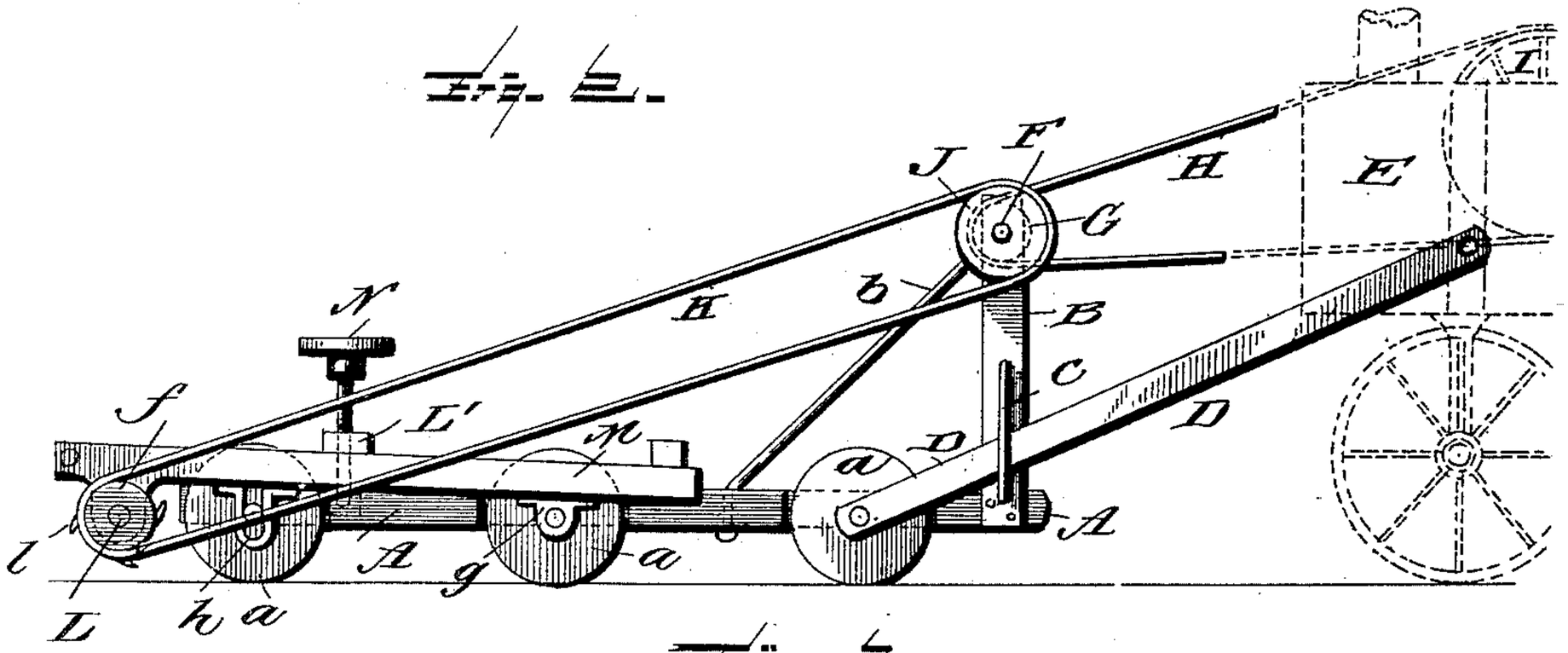
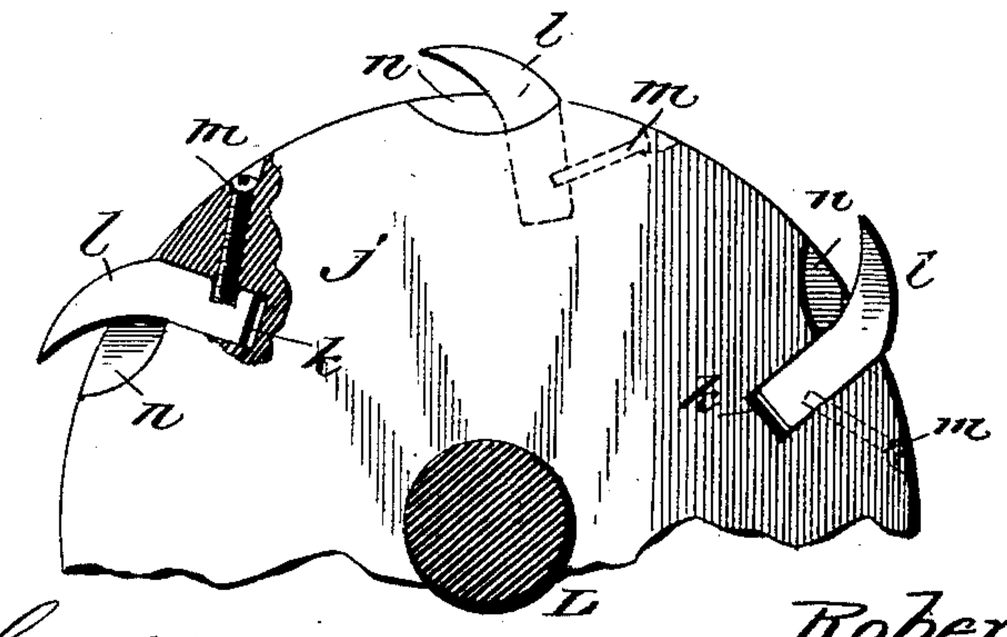


Fig. 3.



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UNITED STATES PATENT OFFICE.

ROBERT HAMILTON LOVE, OF ALLEN, TEXAS.

MACHINE FOR DRESSING SURFACES OF PAVEMENTS.

SPECIFICATION forming part of Letters Patent No. 462,264, dated November 3, 1891.

Application filed June 30, 1891. Serial No. 398,008. (No model.)

To all whom it may concern:

Be it known that I, ROBERT HAMILTON LOVE, a citizen of the United States, residing at Allen, in the county of Collin and State of Texas, have invented certain new and useful Improvements in Machines for Dressing Surfaces of Pavements; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in machines for dressing surfaces of wooden or block pavements; and it has for its objects, among others, to provide a simple, cheap, durable, and efficient device for dressing the pavements, and which may be operated by a traction-engine of known construction.

It has for a further object to provide for the ready and quick elevation of the cutters above the ground when crossing a railroad-track or other obstruction which would tend to dull or injure the cutters.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a top plan of my improvement ready for attachment to the engine or other motive power. Fig. 2 is a side elevation of the same, showing its attachment to a traction-engine. Fig. 3 is a detail, partly in section and with parts broken away, of the preferred form of cutter on an enlarged scale.

Like letters of reference indicate like parts throughout the several views.

While I have shown what I at the present time consider the best means for carrying out my invention, I do not wish to restrict myself to the exact details of construction shown, as the same is capable of various modifications.

Referring now to the details of the drawings by letter, A designates a frame or platform, which may be of any desired material and size and supported upon rollers or wheels *a*, which may be of any desired number, preferably six, as shown, and of the required diameter. They should be small to bring the platform near the ground. The rear wheels and the middle set are journaled upon axles held in the frame or platform in any suitable manner. To the rear end of this platform are secured the standards B, which are braced by the inclined brace-rods *b*, as seen in Figs. 1 and 2, and upon the outer faces of these standards are the guides *c*, in which are guided the braces D, which are pivoted at their lower forward ends on the axle of the rear wheels, and their other ends are adapted to be secured to some part of the motive power, which is preferably a traction-engine E of any known or approved form of construction.

F is a cross-shaft journaled near the upper ends of the standards and carrying between the standards a pulley G, over which passes a belt or band H, which passes also over a pulley I on the traction-engine and from which motion is imparted to the said cross-shaft. This shaft carries also a pulley J, over which passes the endless belt or band K, which passes over a like pulley *f* on the shaft L of the cutters. The braces D are connected by a cross-brace bar or rod *e*, as shown in Fig. 1.

M is a skeleton frame, in the forward ends of the side bars of which the shaft L is journaled. The rear end of this frame has bearings *g* for the axle of the central set of rollers or wheels, and near the forward ends the side bars of this frame are provided with the bearings or boxes *h* for the front axle, which rides in the vertical slots of said bearings, so that it may be adjusted vertically when desired. This adjustment is attained by means of the set-screw N, which is tapped through the cross-bar L′ of the skeleton frame and into the platform A, as shown in Figs. 1 and 2, so that by manipulation of the screw the skeleton frame may be raised to bring the cutters above the wheels, as shown in Fig. 2, when passing over car-tracks or other obstructions.

The cutters are carried by heads. There may be one or more heads, and each head may be arranged to carry any desired number of cutters. The cutters may be, if desired, circular saws; but it is preferred to employ a a cutter such as is shown in Fig. 3 on an enlarged scale, and wherein *j* indicates the iron

head sleeved upon its shaft and provided with a plurality of sockets *k*, into which the cutters *l* are fitted, the cutters being held in the sockets by the inclined screws *m*, as seen in said Fig. 3, the outer or acting portions of the cutters being rounded, as shown, and the head being provided with a throat or depression *n* in advance of the cutter, as shown, so as to provide a clearance therefor.

The operation is simple and apparent. The device may be either pushed in front of or drawn after the engine. The belt connection from the engine gives motion to the parts and revolves the cutters, which shave off the tops of the blocks. The cutters may be arranged to chip or cut up or down, but preferably up, as they then come in contact with less grit and dirt, which abound more or less on the pavements that have been used. Besides there is less liability of jerking off pieces and edges of the blocks.

The cutters are movable and adjustable. The braces D are pivotally connected with the frame, so that the device will not be affected by any uneven or jostling motion of the engine.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as new is—

1. The platform supported upon rollers and having means for operation from a suitable source of power, combined with a movable frame having bearings for the central and forward rollers of said platform and carrying the cutters, and means for vertical adjustment of the frame, as set forth.

2. The combination, with the platform and its adjustable frame having bearings for the central and forward rollers of said platform and carrying the cutters, of the means for operating the cutters, and the pivoted braces for attachment to a traction-engine, as set forth.

3. The combination, with the platform and its supporting-rollers, of the skeleton frame pivotally held to the platform and having bearings for the central and forward rollers of said platform, the cutters carried by the said frame, the means for adjusting the said frame vertically, the pivoted braces for attachment to an engine, and means for imparting motion to the cutters from an engine, as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ROBERT HAMILTON LOVE.

Witnesses:
J. H. WILSON,
J. M. HUGULEY.