March 11, 1930. O. L. ELLIOTT 1,749,805

ROAD SURFACER

Filed June 10, 1929 2 Sheets-Sheet 1

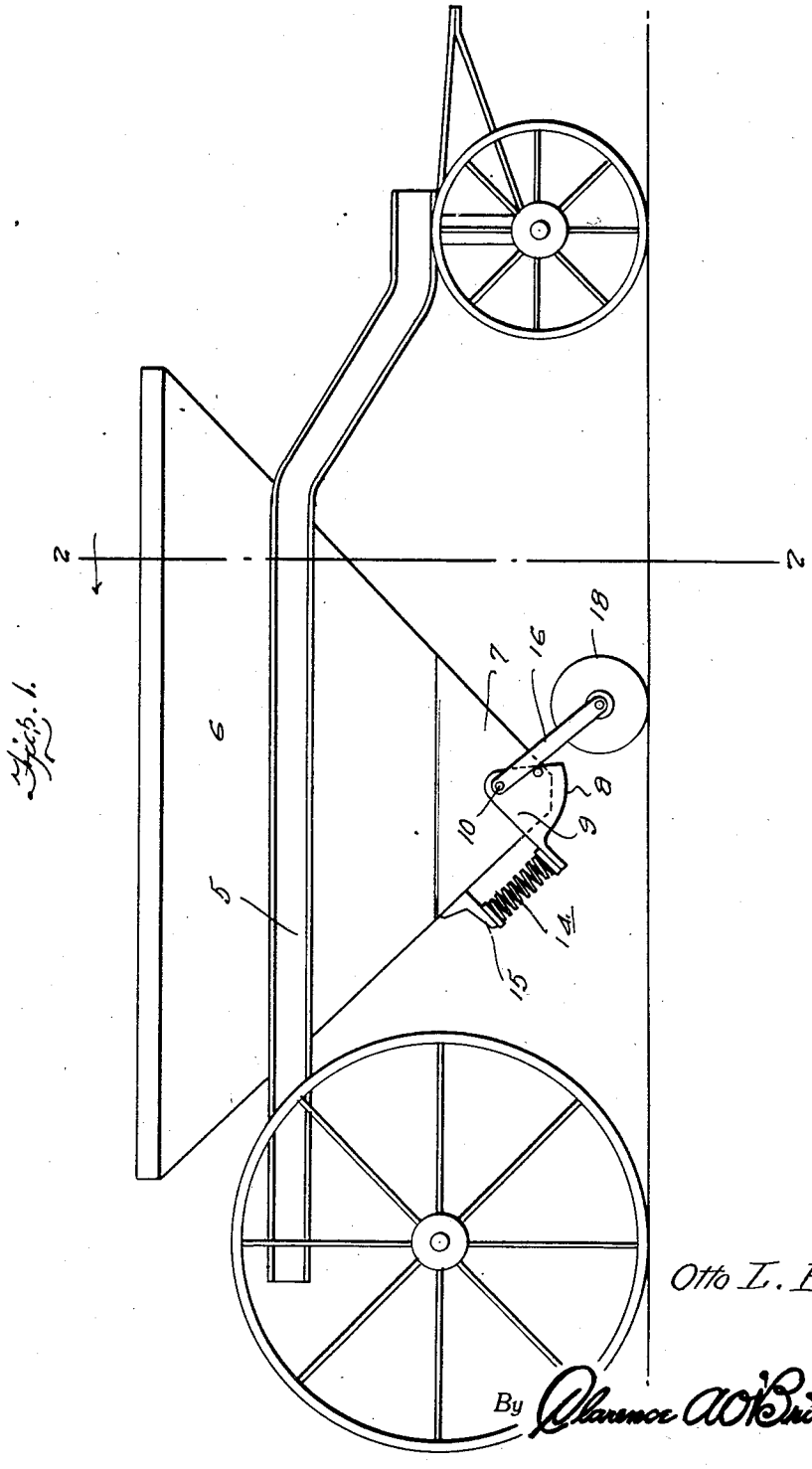


Fig. 1.

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Fig. 2.

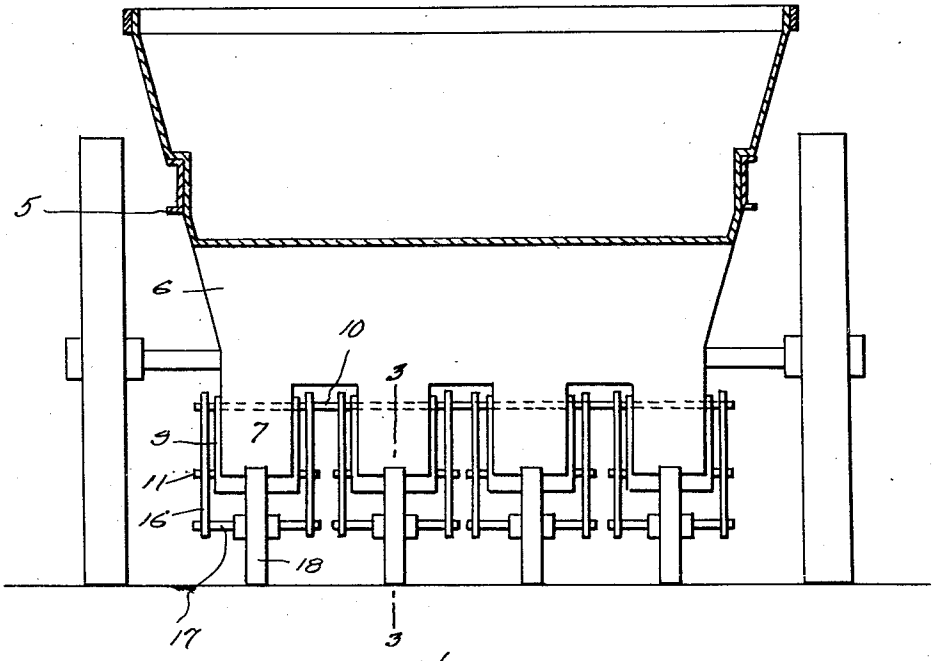
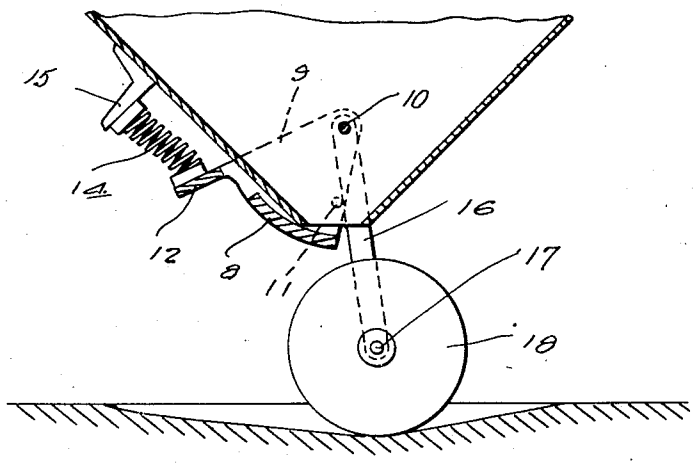


Fig. 3.



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UNITED STATES PATENT OFFICE

OTTO L. ELLIOTT, OF WESTVILLE, OKLAHOMA

ROAD SURFACER

Application filed June 10, 1929. Serial No. 369,908.

The present invention relates to a road surfacer and has for its prime object to provide a wheeled hopper for containing gravel or other surfacing material in combination with means for automatically dropping the material on the road as required.

Another very important object of the invention resides in the provision of a road surfacer of this nature which is exceedingly simple in its construction, inexpensive to manufacture, strong and durable, thoroughly efficient and reliable in operation, and otherwise well adapted to the purpose for which it is designed.

With the above and numerous other objects in view as will appear as the description proceeds, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawing:

Figure 1 is a side elevation of the apparatus embodying the features of my invention,

Figure 2 is a vertical transverse section therethrough taken substantially on the line 2—2 of Figure 1, and

Figure 3 is an enlarged detail section taken substantially on the line 3—3 of Figure 2.

Referring to the drawing in detail it will be seen that the numeral 5 denotes a wheeled frame in which is mounted the hopper 6 having a plurality of depending spouts 7 at the bottom thereof.

A valve structure associated with each spout comprises a valve plate 8 to cross the opening of the spout, said plate 8 being formed with spaced parallel coextensive wings 9 straddling the spout and rockable on a rod 10 projecting through the upper portions of the spout. Pins 11 project outwardly from the forward edges of the wings 9.

A cross member 12 connects the wings 9 and a spring 14 is disposed between the cross member 12 and a bracket 15 on the hopper so as to normally urge the valve plate 8 to a closed position over the opening of the spout.

A pair of arms 16 are rockable at their upper ends on the rod 10 one to each side of the spout and have axles 17 journaled in their lower extremities. A wheel 18 is mounted on the axle.

From the above detailed description it will be seen that when the apparatus is pulled along the road and one or more of the wheels 8 move down in a hole in the road the arms of the wheels will engage the pins 11 to swing the valves to open position allowing the proper amount of material to flow from the spout into the hole and as soon as the wheel rides out of the hole the valve will close because of the spring 14.

The weight of the wheels, of course, will be such as to overcome the spring 14 when the wheels swing down into a hole in the roadway.

It is thought that the construction, utility and advantages of this invention will now be quite apparent to those skilled in this art without a more detailed description thereof.

The present embodiment of the invention has been described in considerable detail merely for the purposes of exemplification since in actual practice it attains the features of advantage enumerated as desirable in the statement of the invention and the above description.

It will be apparent that changes in the details of construction, in the combination and arrangement of parts may be resorted to without departing from the spirit or scope of the invention as hereinafter claimed or sacrificing any of its advantages.

Having thus described my invention, what I claim as new is:

1. In a device of the class described, a wheeled hopper, a spout depending from the hopper, a valve plate movable over the opening of the spout, a pair of wings straddling the spout, means for rockably mounting the wings on the spout, pins projecting outwardly from the wings, a pair of arms, means for rockably mounting the arms on the spout one to each side thereof, a wheel having an axle journaled in the arms, said pins being in the path of swinging movement of said arms for opening the valve plate.

2. In a device of the class described, a wheeled hopper, a spout depending from the hopper, a valve plate movable over the open-

ing of the spout, a pair of wings straddling the spout, means for rockably mounting the wings on the spout, pins projecting outwardly from the wings, a pair of arms, means for rockably mounting the arms on the spout one to each side thereof, a wheel having an axle journaled in the arms, said pins being in the path of swinging movement of said arms for opening the valve plate, means for normally holding the valve plate in a closed position.

3. In a device of the class described, a wheeled hopper, a spout depending from the hopper, a valve plate movable over the openings of the spout, a pair of wings straddling the spout, means for rockably mounting the wings on the spout, pins projecting outwardly from the wings, a pair of arms, means for rockably mounting the arms on the spout one to each side thereof, a wheel having an axle journaled in the arms, said pins being in the path of swinging movement of said arms for opening the valve plate, a spring associated with the valve normally urging it to a closed position.

In testimony whereof I affix my signature.

OTTO L. ELLIOTT.