

(No Model.)

2 Sheets—Sheet 1.

A. H. PERKINS.

APPARATUS FOR REPAIRING ASPHALT PAVEMENTS.

No. 501,536.

Patented July 18, 1893.

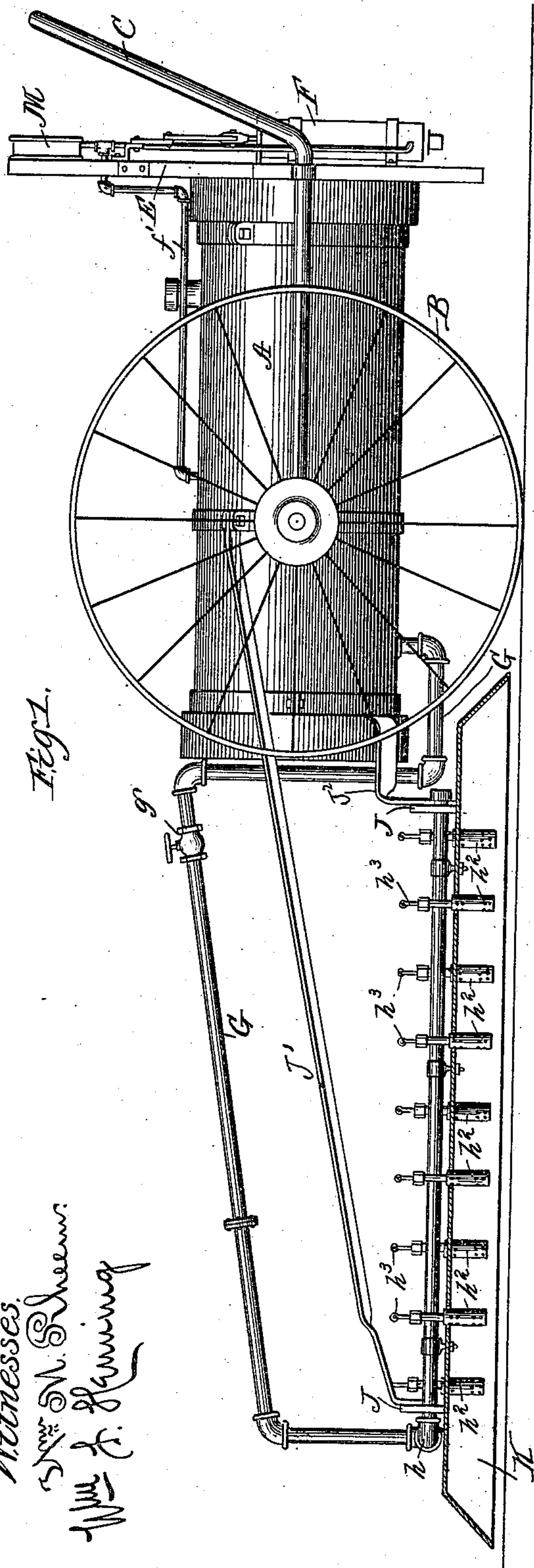


Fig. 1.

Witnesses.
S. M. S. S. S.
W. F. Fleming

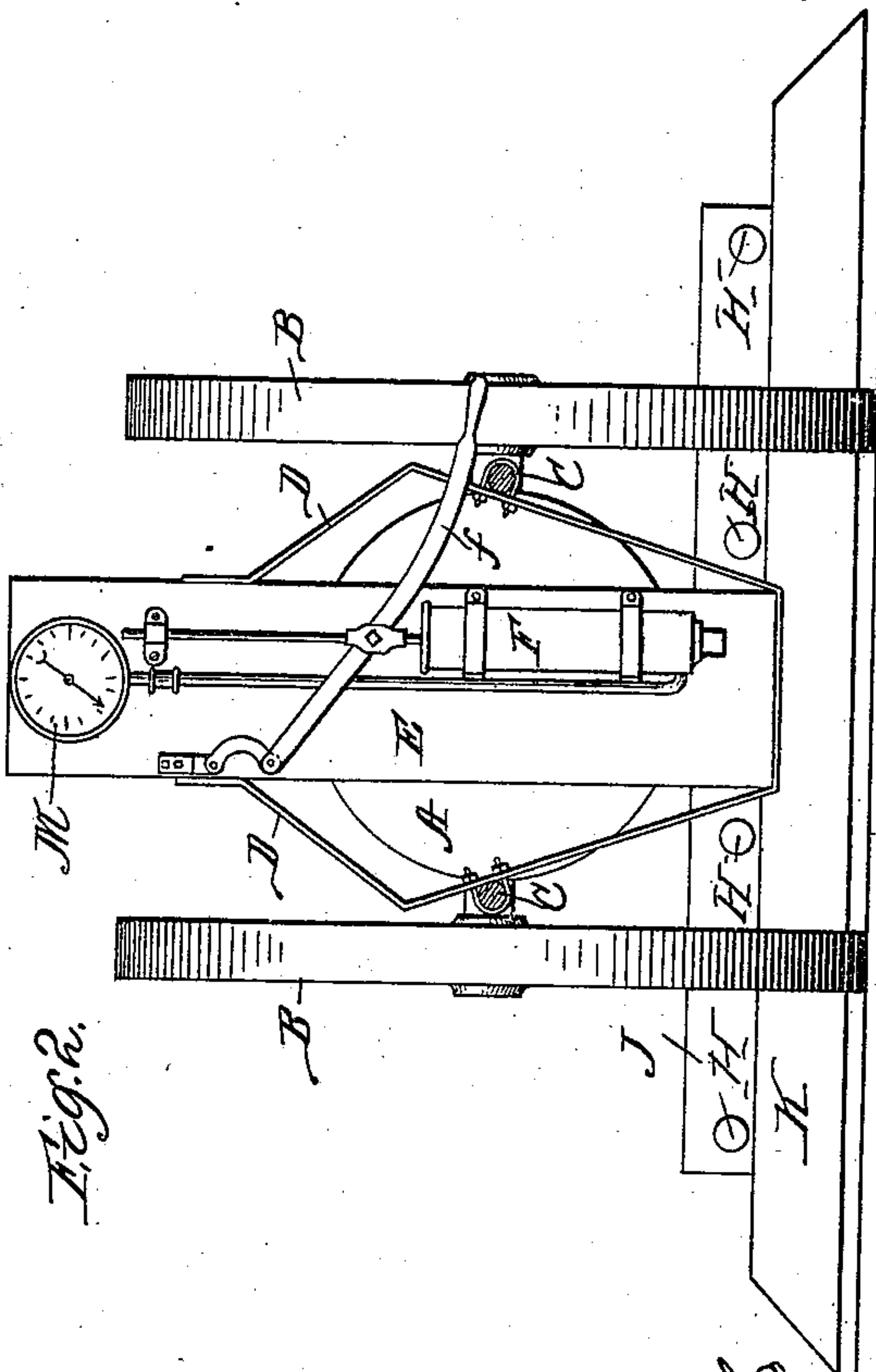


Fig. 2.

Inventor
A. H. Perkins
By Raymond & Co. Attorneys

(No Model.)

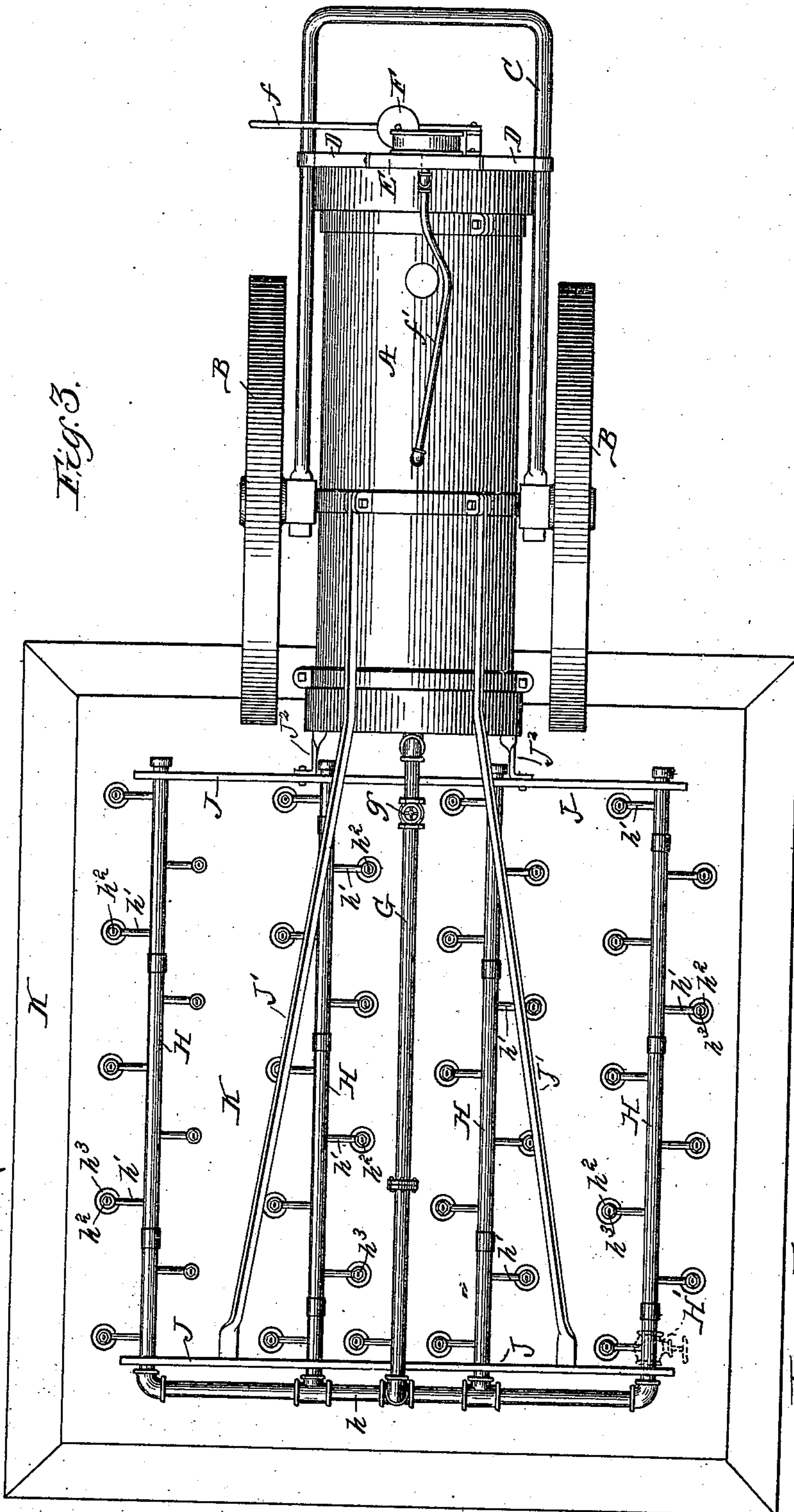
2 Sheets—Sheet 2.

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Witnesses.
Saml. M. Rhems.
Wm. F. Hemmings

Inventor.
A. H. Perkins.
By Raymond & Quinlan Attys.

UNITED STATES PATENT OFFICE.

AMOS H. PERKINS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE WESTERN
PAVING AND SUPPLY COMPANY, OF SAME PLACE.

APPARATUS FOR REPAIRING ASPHALT PAVEMENTS.

SPECIFICATION forming part of Letters Patent No. 501,536, dated July 18, 1893.

Application filed March 8, 1893. Serial No. 465,136. (No model.)

To all whom it may concern:

Be it known that I, AMOS H. PERKINS, a citizen of the United States, residing at Chicago, county of Cook, State of Illinois, have invented a certain new and useful Improvement in Apparatus for Repairing Asphalt Pavements; and I declare the following to be a full, clear, and exact description of the invention, such as it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object the production of a portable apparatus for heating the surface of asphalt pavements and is for use more particularly in connection with my improved method of repairing asphalt pavements, an application for which was filed March 8, 1893, Serial No. 465,137. It consists in a combination of devices and appliances hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of my apparatus. Fig. 2 is a rear elevation of the same. Fig. 3 is a plan view.

In the device employed in carrying out the invention A represents a tank mounted upon suitable wheels B and provided with a suitable handle C. At one end of the tank supported by the braces D which are engaged to the handle, is the board E. On this board is an air pump F provided with a suitable operating handle *f* with an outlet pipe *f'* which leads into the top of the tank. From the bottom of the tank and adjacent to the opposite end is an outlet pipe G provided with a valve *g*.

H represents a series of horizontal pipes, four in number, connected together at one end by the pipe *h* and supported by the cross bars or braces J, the latter being supported from the tank by the braces J', J². Each of the pipes H may be supplied with a valve H' as indicated by dotted lines in Fig. 3 for cutting out all the burners thereof simultaneously. Extending from each of the horizontal pipes H are short pipes or spurs *h'* and at the end of each of these is a burner *h*² of any desired construction. Preferably these burners are of the form usually employed for producing a blast with a gasoline vapor flame. Each of the burners is controlled by its own valve *h*³. Supported by and depending from

the cross bars J is a hood or shield K, each burner passing through an orifice in this hood and projecting beneath the same. Each orifice through which each burner passes is somewhat larger than the burner so that plenty of oxygen may be supplied to the burner and thus insure proper combustion. It will now be seen that by filling the tank with gasoline and maintaining plenty of pressure above the same a strong blast may be obtained at each of the burners. Connecting with the pipe *f'* is a pressure gage M so that the operator can easily watch the pressure and maintain sufficient in the tank.

The operation will be easily understood. As many of the burners as it is desired to use are turned on and the operator grasping the handle moves the apparatus which easily balances on the wheels, to the point where the spot to be repaired is located placing the burner above the spot. The blast soon heats the pavement to the desired condition when the apparatus can be moved to another spot. If the spot is too large to be covered by the burners at one time the outer edge of the spot is first subjected to the blast and the apparatus then drawn, wheels first, across the balance of the spot, thus leaving that portion that has already been subjected to the blast to be operated upon by another hand.

It is obvious that many details of the apparatus might be altered or dispensed with, such for instance as the substitution of petroleum oil or other fuel, a variation in the number or form of the burners, and many other features, without affecting the essence of my invention which lies in the production of a portable apparatus for subjecting an asphalt pavement to a blast of heat after the pavement has been laid.

What I claim is—

1. In an apparatus for repairing asphalt pavements, the combination of a series of burners and means for movably supporting the same in close proximity to the pavement, substantially as described.

2. In an apparatus for repairing asphalt pavements, the combination of a series of hooded burners and means for movably supporting the same in close proximity to the pavement, substantially as described.

3. In an apparatus for repairing asphalt pavements, the combination of a series of hooded fluid burners, and a reservoir for supplying fuel thereto, said reservoir and burn-
5 ers mounted on a wheeled frame and the burners supported in close proximity to the pavement, substantially as described.

4. In an apparatus for repairing asphalt pavements, the combination with a series of
10 hooded fluid burners supported in close proximity to the ground, a reservoir for supplying fuel to the burners, and means for applying pressure to the fuel to force it to the burners, of a wheeled frame carrying said
15 apparatus, substantially as described.

5. In an apparatus for repairing asphalt pavements the combination of a fuel reservoir, a pump for exerting a pressure on the fuel therein, a series of burners connected with a series of horizontal pipes which are
20 connected with the reservoir, and a plate forming a hood or shield through which each burner passes, the orifice around each burner being somewhat larger than the burner itself, substantially as described.

AMOS H. PERKINS.

Witnesses:

TODD MASON,
O. R. BARNETT.