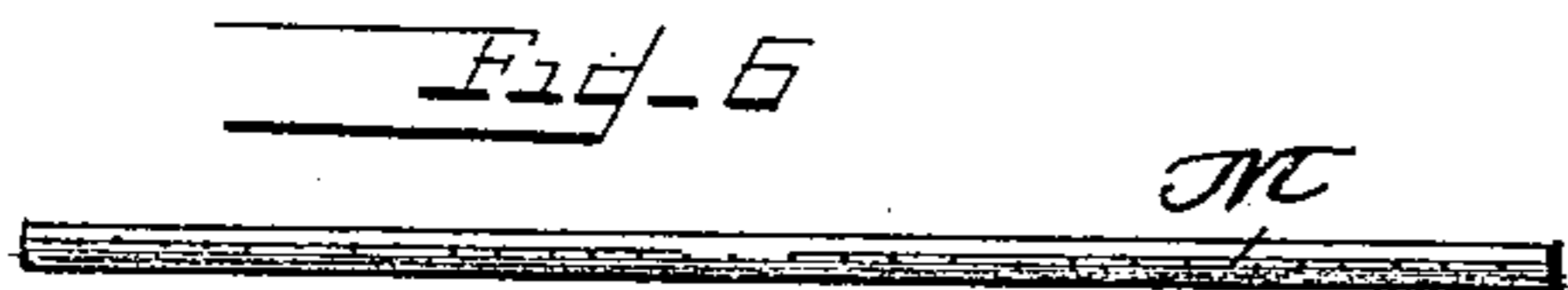
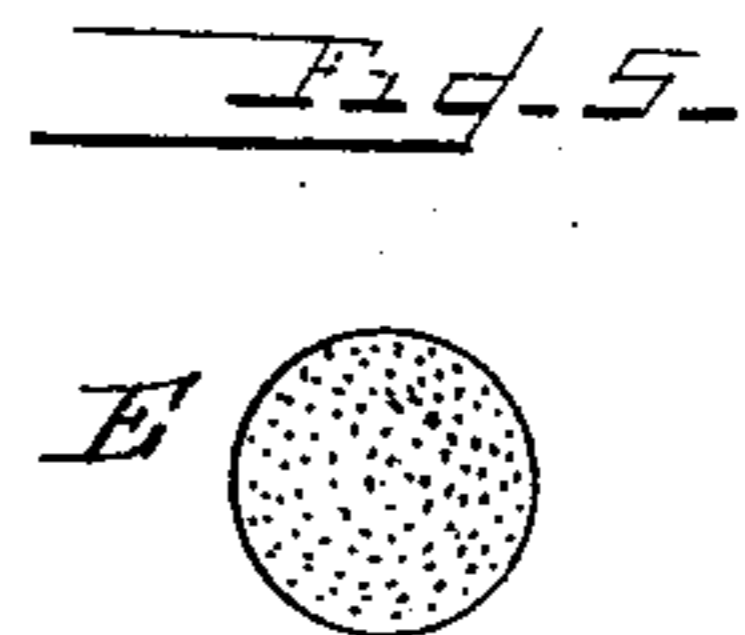
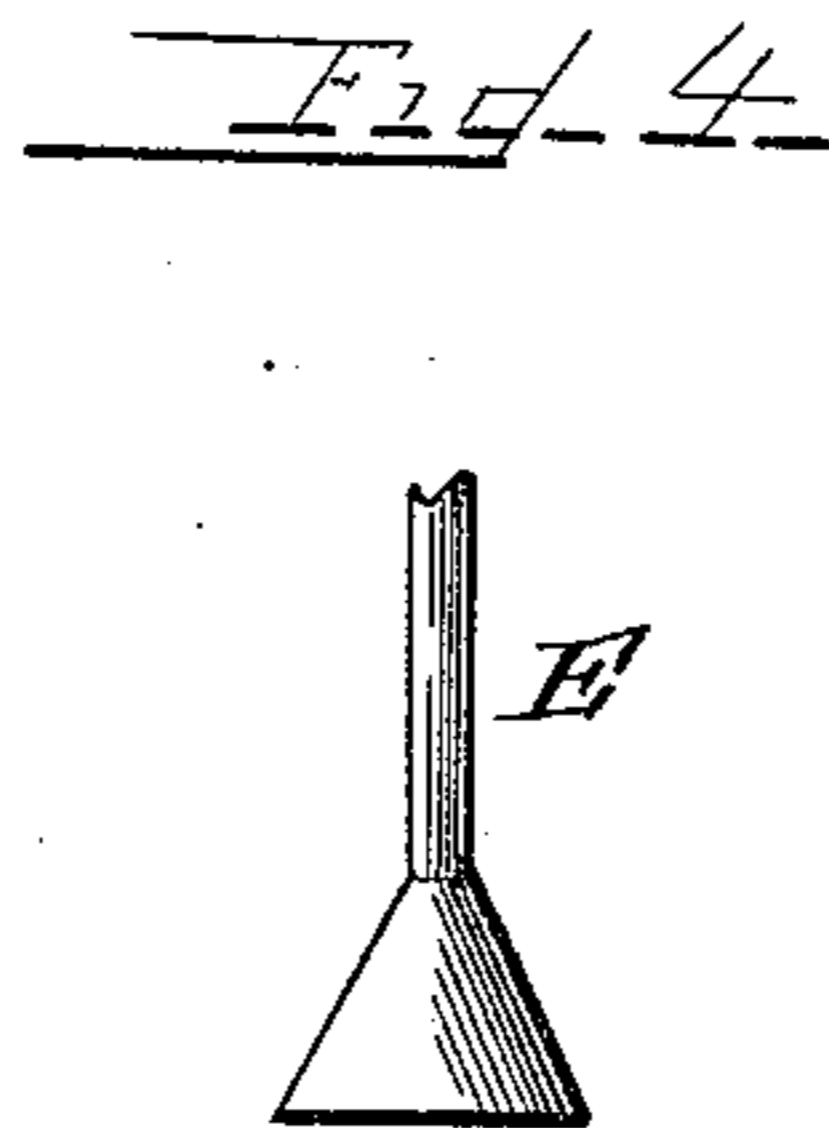
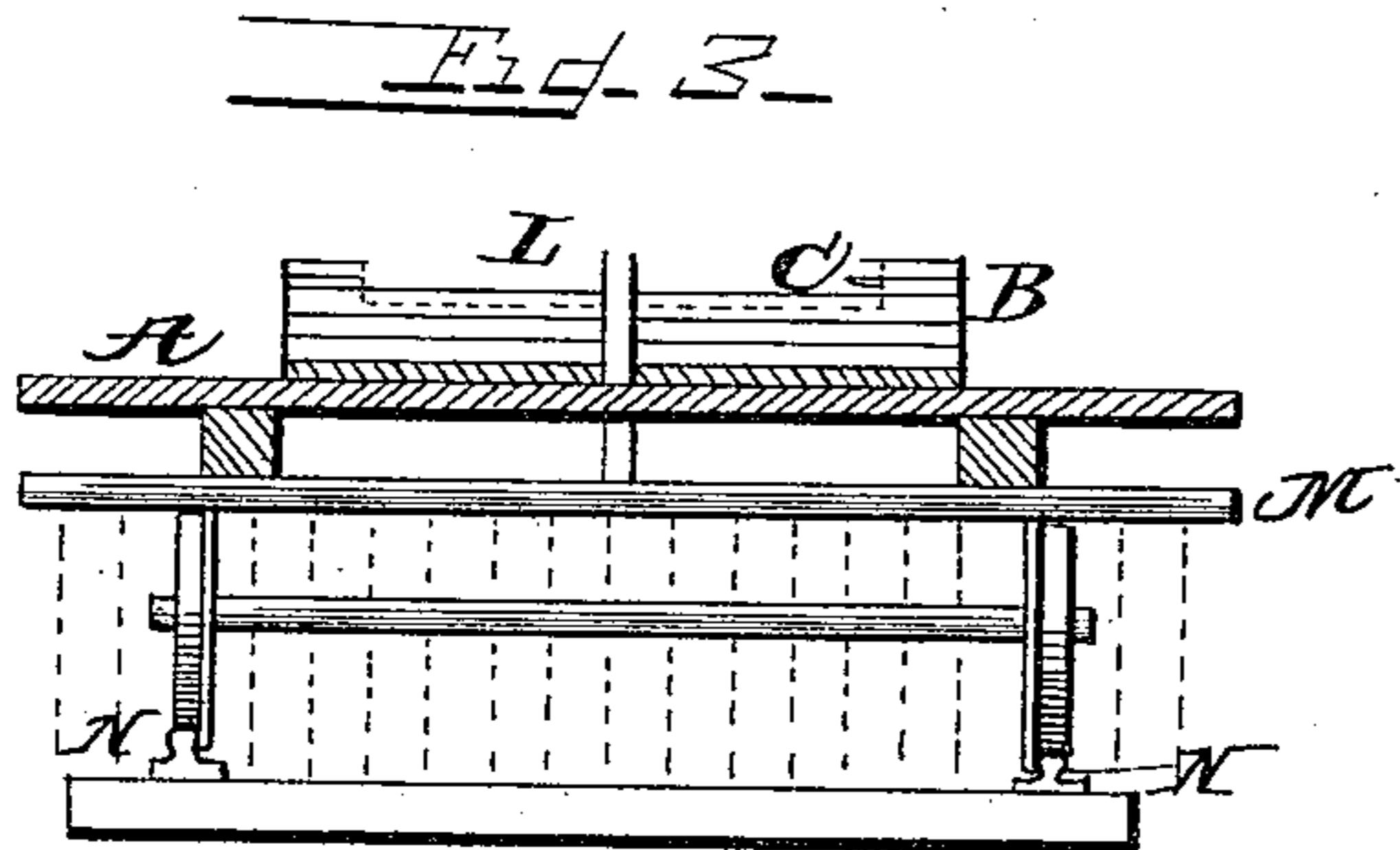
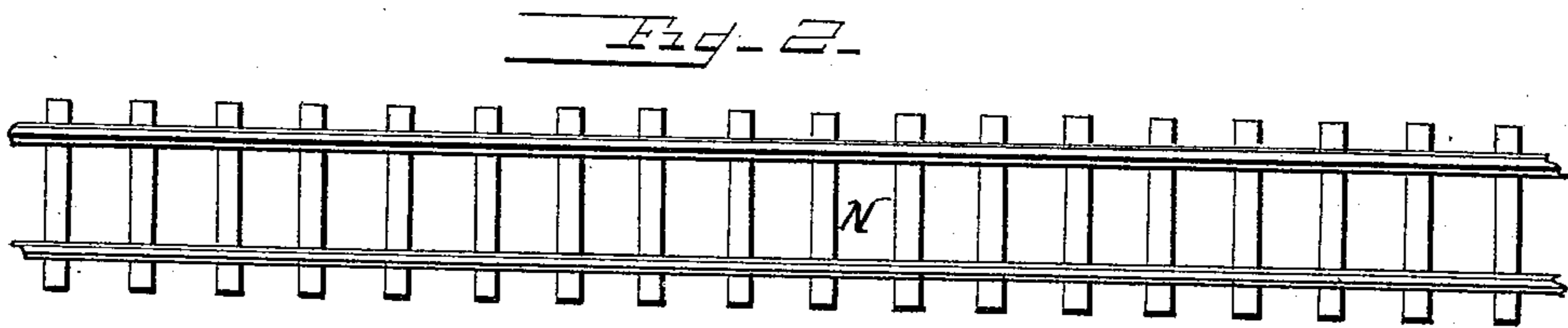
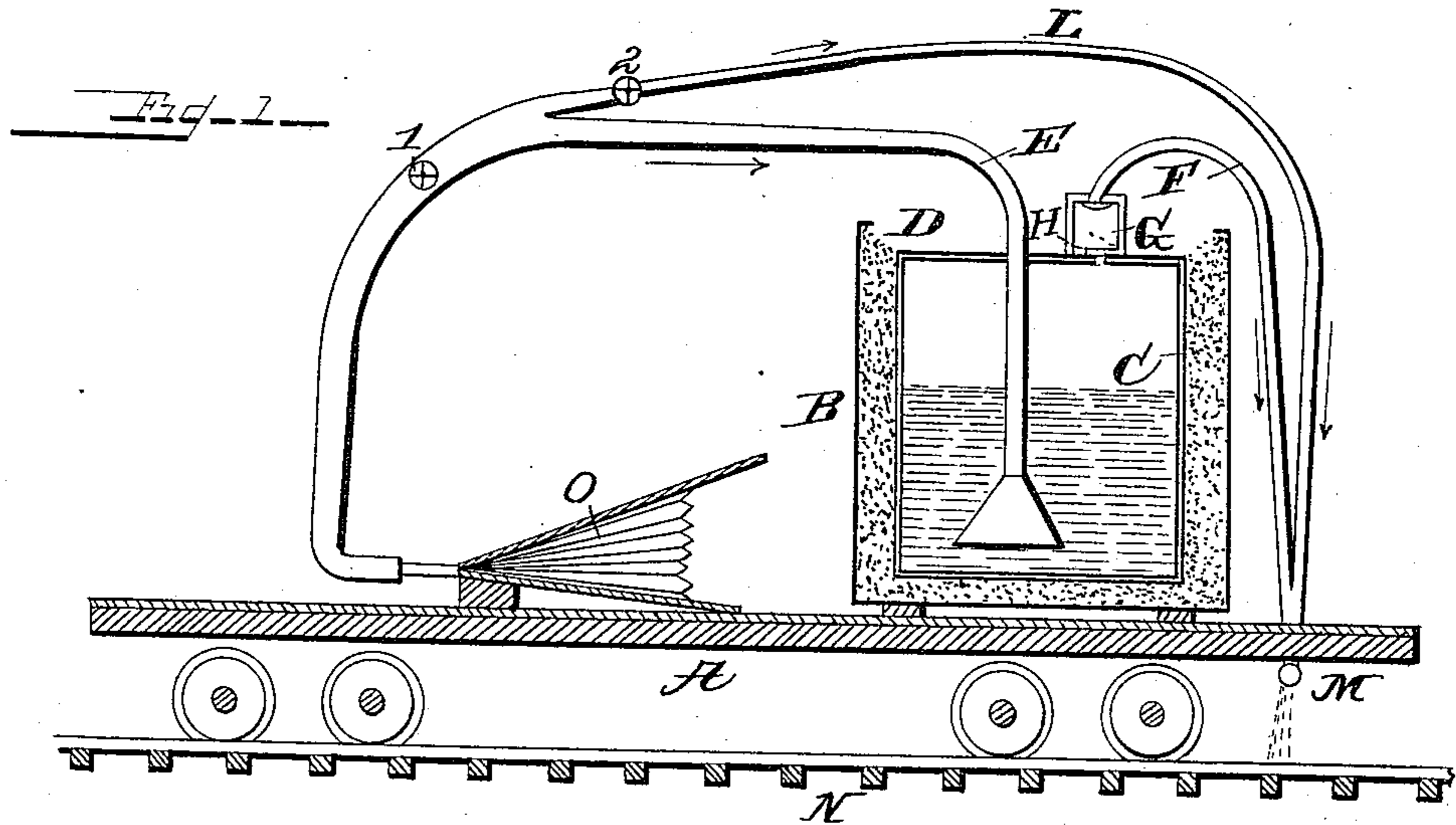


(No Model.)

A. H. BRADLEY.
GRASS BURNER FOR RAILWAY TRACKS.

No. 451,218.

Patented Apr. 28, 1891.



WITNESSES;

G. A. Taubenschmitt.
C. J. Bell.

INVENTOR,

A. H. Bradley

BY

W. P. Stringfellow

ATTORNEY.

UNITED STATES PATENT OFFICE.

ALFRED H. BRADLEY, OF WHITEVILLE, LOUISIANA.

GRASS-BURNER FOR RAILWAY-TRACKS.

SPECIFICATION forming part of Letters Patent No. 451,218, dated April 28, 1891.

Application filed October 31, 1890. Serial No. 369,993. (No model.)

To all whom it may concern:

Be it known that I, ALFRED HATCH BRADLEY, a citizen of the United States, residing at Whiteville, in the parish of St. Landry and State of Louisiana, have invented certain new and useful Improvements in a Grass-Burner for Railway-Tracks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in a grass-burner for railway-tracks, and its novelty will be fully understood from the following description and claims, when taken in connection with the annexed drawings; and the objects of my invention are to provide a device whereby the grass growing between the cross-ties and in close proximity to the rails may be burned, thereby saving time and labor. I accomplish these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a sectional side view. Fig. 2 is a top view of railway-track. Fig. 3 is a sectional front view. Fig. 4 is a sectional side view of air-pipe. Fig. 5 is a bottom view of air-pipe. Fig. 6 is a bottom view of perforated pipe.

In the drawings, A refers to an ordinary flat car upon which I place a box or case B, and within which I place an oil tank or reservoir C, which is surrounded by a compartment or chamber filled with sand or gravel and designated by D, and projecting within C, I place an air-pipe E, as shown in Fig. 1, the end of said pipe having a perforated flaring end. At a point shown by F, I place a pipe for gas, the upper end of said pipe being attached to a casing G, and the lower end of said gas-pipe forming a junction with an air-pipe L; and the pipes F and L, when thus joined, form a continuous passage for gas and air to perforated burner M. The end of pipe F, which projects in casing G, is provided with a perforated plate, as shown by K, and resting just over the opening in C, and through which gas enters G, I place a valve H, which is preferably made of leather, and

is so constructed that a pressure of gas will raise said valve; but should there be a counter-pressure by flame from the opposite direction the valve H will close and prevent escape-ment of gas.

N is a railway-track, and O a bellows for forcing air through pipes E and L, 1 and 2 showing valves for controlling flow of air.

The mode of operation is as follows, the box or case B being placed upon an ordinary flat or box car, and the burner M placed in position, as shown in Figs. 1 and 3, the reservoir or tank C being filled with mineral oil, and the connections made with pipes, and valves 1 and 2 opened so as to permit air to flow through pipes E and L by pressure upon bellows O, and in this manner the gas generated from oil is carried through pipe F and in the direction indicated by arrow, and by simply taking a lighted match and applying to perforated pipe M a flame is produced, which extends downward upon the track N, and the entire length of the cross-ties, and in this manner every blade of grass growing upon the track is burned, the track is more or less hardened, and all scraping of track or loosening of cross-ties avoided.

I do not confine myself to the particular construction shown in forcing air by bellows into pipes, as this pressure may be obtained in many ways; nor do I confine myself to any particular mode of heating sand or gravel when placed in compartment D.

A striking advantage of my invention is that the grass may be burned as the car is in motion moving over the track, and thereby saving much time and labor. By simply removing the pressure of air flowing through pipes E and L the flame is extinguished.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a grass-burner for railway-tracks, such as described, the case B, having a sand or gravel chamber surrounding mineral-oil reservoir or tank C, the air-pipe E, extending within C, the gas-pipe F, with perforated end K, connecting with G, and air-pipe L, as set forth.

2. In a grass-burner for railway-tracks,
such as described, the case B, having a sand
or gravel chamber surrounding the mineral-
oil reservoir or tank C, the air-pipe E, ex-
5 tending within C, and the valve H, in combi-
nation with pipes F and L and burner M, as
set forth.

In testimony whereof I affix my signature in
presence of two witnesses.

ALFRED H. BRADLEY.

Witnesses:

PERCY D. PARKS,
MICHEL DE COURSEY.