No. 797,890. PATENTED AUG. 22, 1905.

J. H. HANLON.

TRACK SANDING DEVICE.

APPLICATION FILED MAY 11, 1905.

2 SHEETS—SHEET 1.

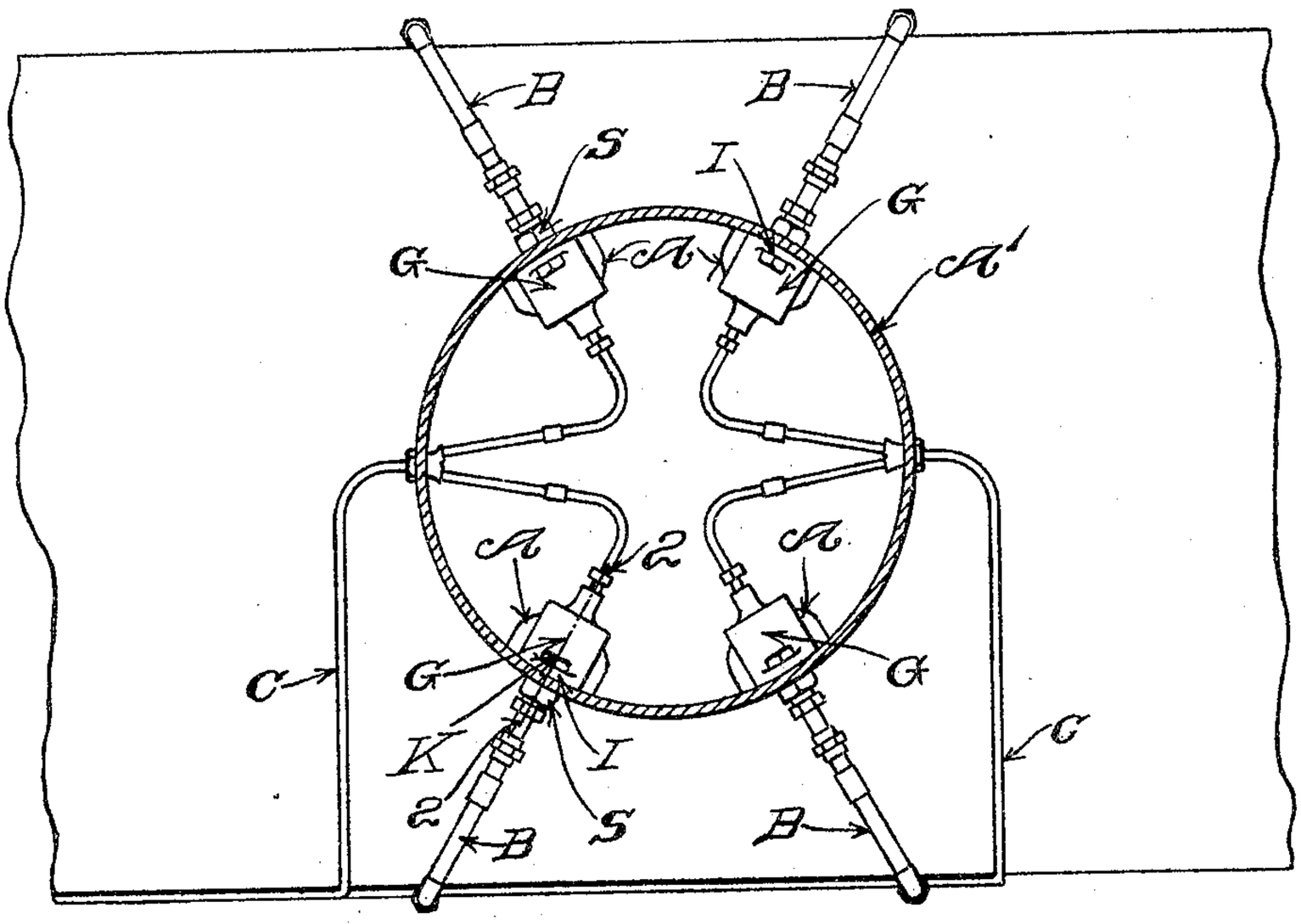

Fig. 1.

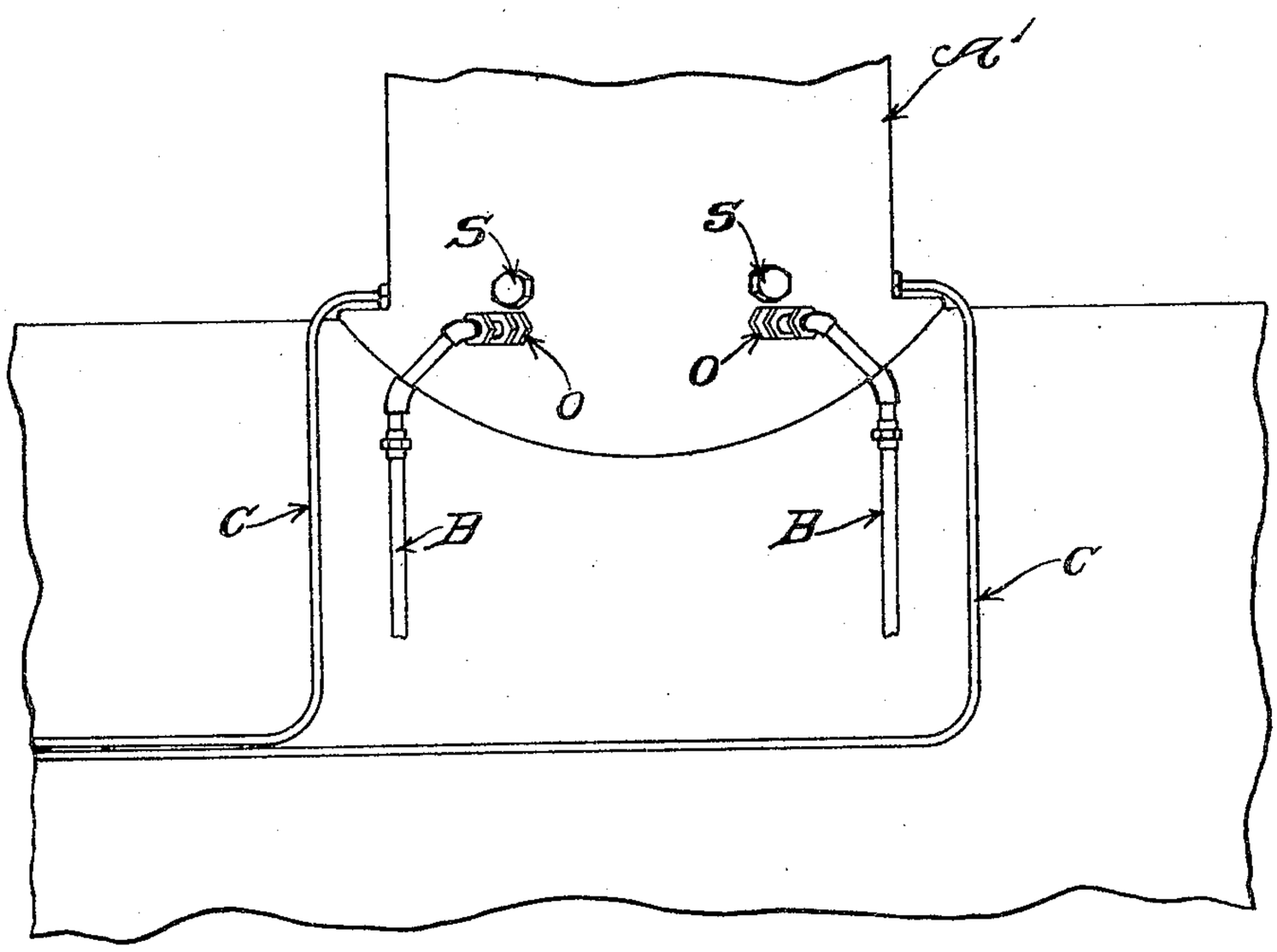

Fig. 7.

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2 SHEETS—SHEET 2.

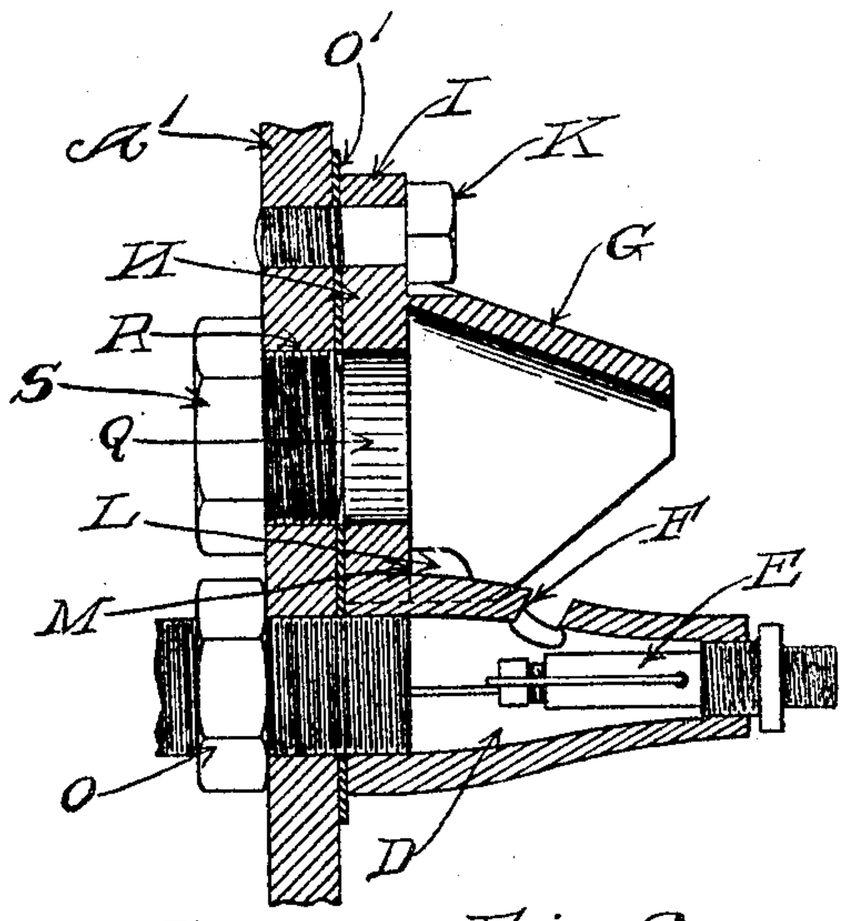

Fig. 2.

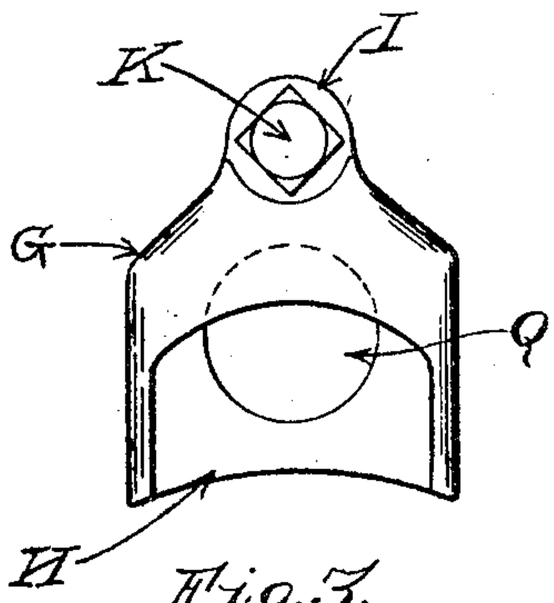

Fig. 3.

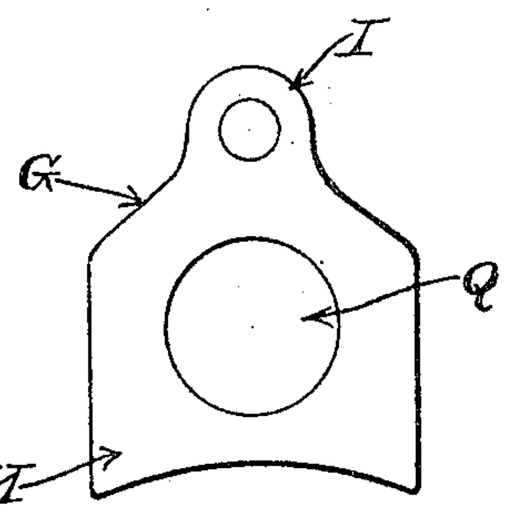

Fig. 4.

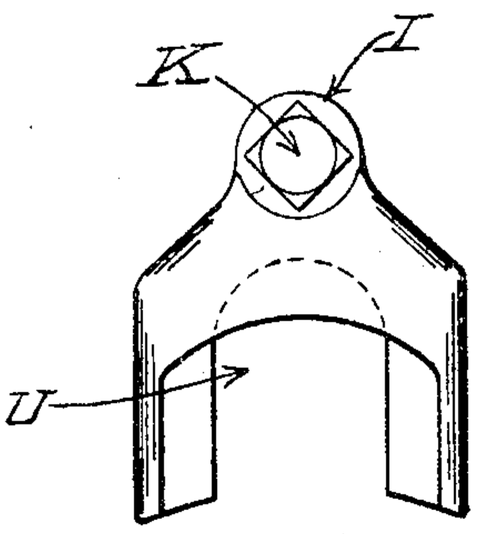

Fig. 5.

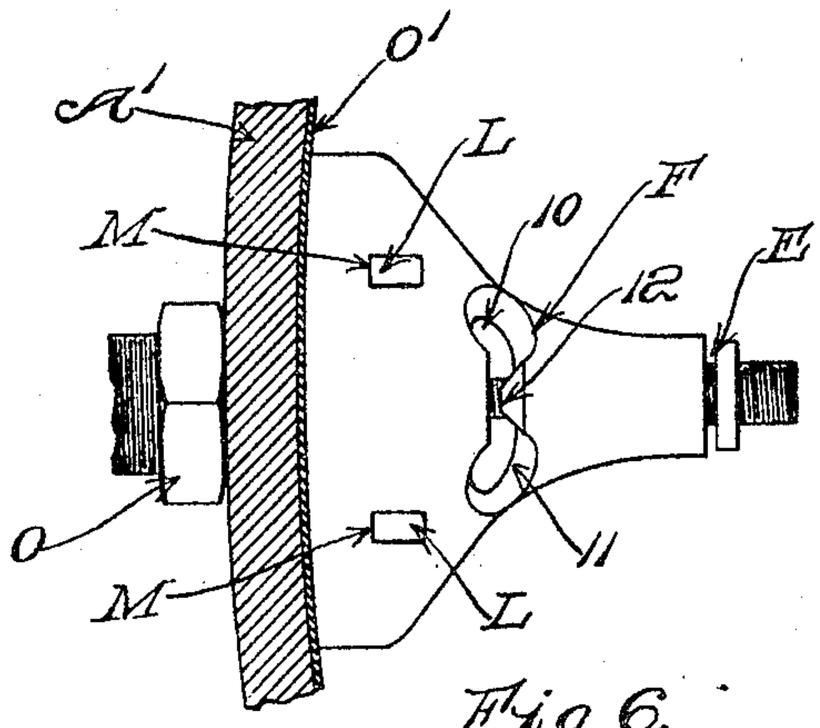

Fig. 6.

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UNITED STATES PATENT OFFICE.

JOHN HENRY HANLON, OF SOMERVILLE, MASSACHUSETTS.

TRACK-SANDING DEVICE.

No. 797,890. Specification of Letters Patent. Patented Aug. 22, 1905.

Application filed May 11, 1905. Serial No. 259,970.

To all whom it may concern:

Be it known that I, JOHN HENRY HANLON, a citizen of the United States, residing at 28 Holyoke road, Somerville, Massachusetts, have invented a certain new and useful Improvement in Track-Sanding Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has for its object an improvement on the track-sanding devices shown in the United States Letters Patent Nos. 737,228 and 753,794, granted to me August 21, 1903, and March 1, 1904, respectively.

My present invention has for its object to provide a sand-inlet hole for the sand-collector of the track-sanding devices which shall be less likely to become clogged during use and also to provide convenient means for cleaning out the said sand-inlet holes without removing the sand from the box.

My invention is applicable to other forms of sanders which employ sand-collectors within the interior of the sand-dome; but I have illustrated it in connection with devices like those shown and described in my hereinbefore-mentioned patents, because that is the form in which I have put the invention into actual operation.

The invention will be readily understood from the following description, in which reference is made to the accompanying drawings, and the novel features thereof are pointed out, and clearly defined in the claims at the close of this specification.

In the drawings, Figure 1 is a plan view of the sand box or dome of a locomotive to which is applied my invention. Fig. 2 is a section on line 2 2, Fig. 1. Fig. 3 is a front view, and Fig. 4 a back view, of the hood. Fig. 5 shows a modified form of hood. Fig. 6 is a plan view of a sand-collector. Fig. 7 is an elevation of a sand-box, &c.

Referring to the drawings, there is indicated at A (see Fig. 1) four sand-collectors of the type described in my patents hereinbefore referred to, the said sand-collectors being secured to the inside wall of a sand-box A′. Sand-outlet pipes are indicated at B and air-inlet pipes at C, the said sand-collectors A being arranged in two pairs. The sand-collectors A are of the same general shape that is described in my previous patents and have an interior chamber D, into which projects the air-blast nozzle E. The sand from the sand-box passes into the interior chamber D by means of the forwardly-inclined sand-inlet hole F, which is composed of two circular holes 10 and 11, connected by a slit 12, forming a substantially 8-shaped hole, as shown in Fig. 6. I find that this form of hole is much less likely to become clogged than other holes and also that it is very easy to clean if it does become clogged, because there is usually some part which remains unclogged and to which access may be had with some convenient cleaning instrument, as a hook, and it is easy after once having inserted the cleaning instrument to lift the stones or other clogging matter out of the remainder of the inlet-hole. Directly above the said collector A, I locate a protecting-hood G, (see Figs. 2, 3, and 4,) which extends forward and downward toward the interior of the sand-box. This hood G is provided with a slightly-curved back wall H, which fits against the curved interior of the sand-box and has formed at the top a lug I, through which a bolt or cap-screw K passes into the wall of the sand-dome, thereby securing the hood in place at the upper portion thereof. Upon the upper surface of the sand-collector A (see Fig. 6) I form a pair of lugs L, having their surface M, which is nearest the interior surface of the sand-box, at a distance from the end of the said sand-collector equal to the thickness of the wall H of the hood G. When the hood G is placed in its proper location and the cap-screw K is in place, the sand-collector A is put in its proper position and secured by means of the exterior coupling or nipple O. By this means I am enabled to hold the hood at its lower edge firmly in place against the interior wall of the said sand-dome without the necessity of drilling more holes through the wall of the sand-dome. A gasket O′, of rubber or other similar material, is placed between the interior wall of the sand-dome and the abutting portions of the hood G and sand-collector A to keep out any moisture.

The hood G is provided with an ingress-hole Q of considerable diameter, as will be clearly seen in Figs. 3 and 4, which hole registers with a hole R in the wall of the said sand-box and is closed by means of a screw-threaded plug or cover S. By means of the registering holes Q and R easy access is afforded from the outside of the sand-dome to the sand-inlet hole F in the sand-collector, so that the operator by inserting his fingers or a suitable instrument through the said holes Q and R may remove any stones or other substances which have clogged the sand-inlet hole F and

prevented the free ingress of the sand to the interior of the sand-collector A. The forwardly-projecting portion T of the hood G slopes downwardly, as shown in Fig. 2, and prevents the sand in the box from running out over the locomotive when the plug S is removed from the hole R.

In Fig. 5 there is shown a slightly-modified form of hood which has the hole U corresponding to the hole R (shown in Figs. 2, 3, and 4,) extended downwardly to the upper surface of the sand-collector A when the two parts are in place. This form of hole gives a little more room for the inserting of the fingers and is particularly adapted for use where the hole through the sand-dome is made of small diameter. It also may be conveniently used where the walls of the sand-dome are thick enough so that the ingress-hole R in the sand-dome may be tapped to receive the plug S, as is seen in Fig. 2. When the wall of the sand-box is not of sufficient thickness for this purpose, the form of hood shown in Figs. 3 and 4 is employed, the hole G being tapped to receive the plug.

The form of hood shown in Fig. 5 is held in place in the same manner as has been described in connection with the hoods in Figs. 2, 3, and 4—namely by a cap-screw K and by the pair of lugs L on the upper side of the sand-collector A.

What I claim is—

1. In a track-sanding device, the combination with a sand-dome, of a sand-collector, an ingress-hole through the said sand-dome, and a hood above the said ingress-hole and shielding the said ingress-hole from a flow of sand from within the said sand-dome.

2. In a track-sanding device, the combination with a sand-dome, of a sand-collector, an ingress-hole through the said sand-dome, whereby access may be had to the sand-inlet holes in the sand-collector, and a hood above the said ingress-hole and shielding the said ingress-hole from a flow of sand from within the said sand-dome.

3. The combination with a sand-dome, having an ingress-hole through the said sand-dome, and a hood above the said ingress-hole, and a sand-collector below the said ingress-hole and provided with lugs on its upper surface engaging the said hood and holding the same against the wall of the said sand-dome.

4. In a track-sanding device, the improved sand-collector having chamber therein, and a sand-inlet therefor comprising two circular holes connected by a slot.

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

JOHN HENRY HANLON.

Witnesses:
GEORGE P. DIKE,
J. HENRY PARKER.