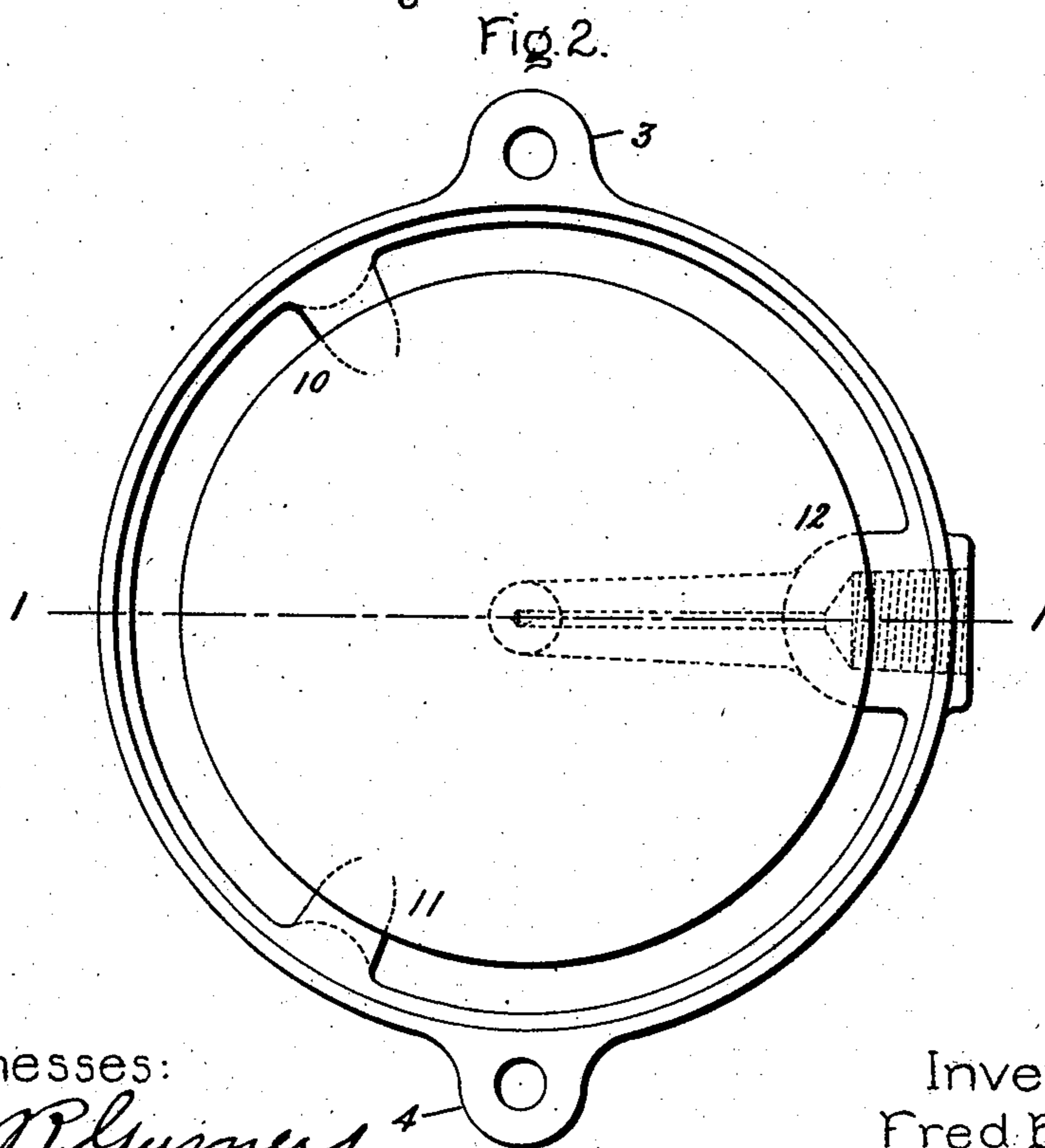
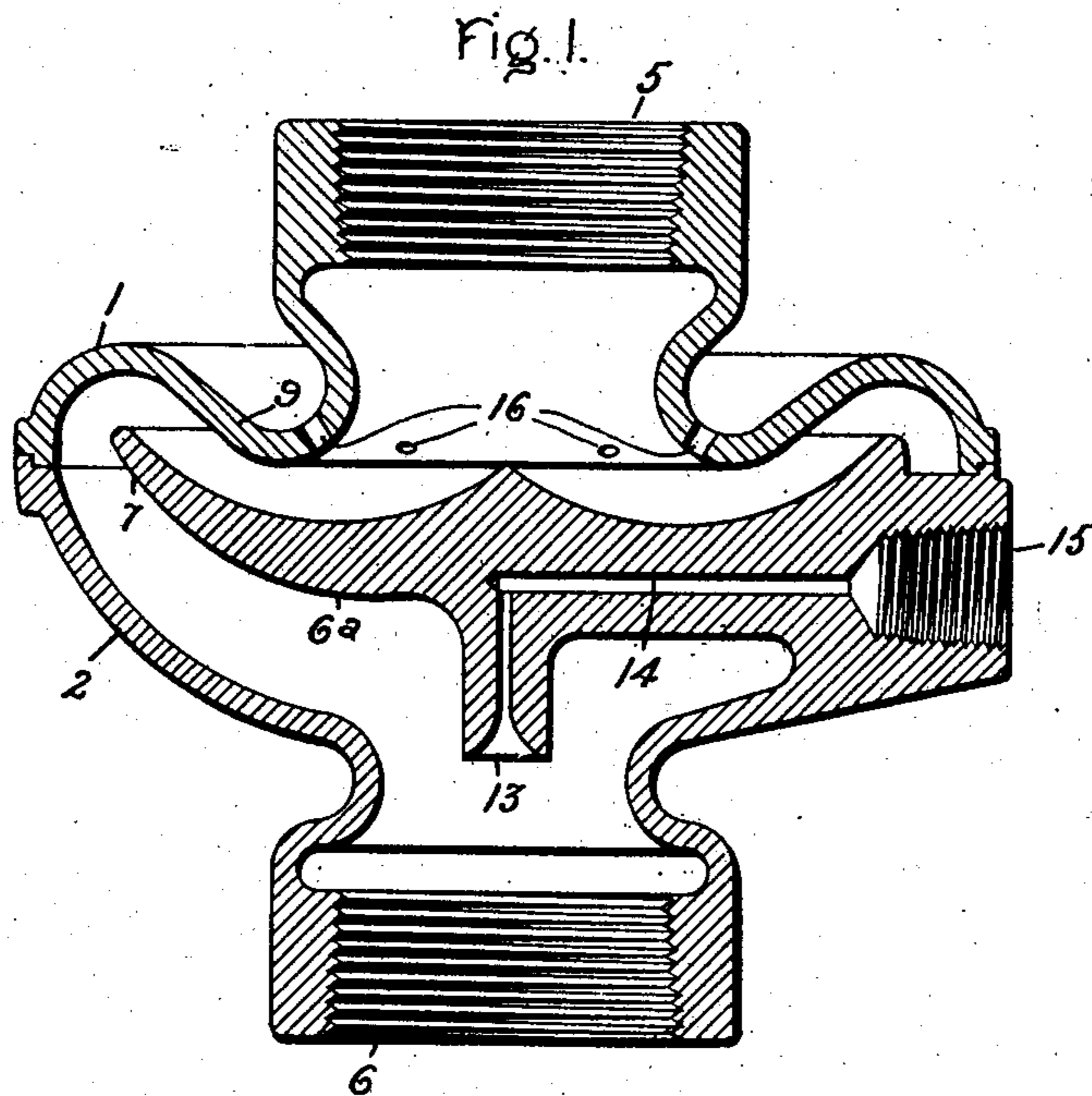


No. 827,294.

PATENTED JULY 31, 1906.

F. B. COREY.
TRACK SANDER.

APPLICATION FILED FEB. 15, 1904.



Witnesses:
Ernest Blumery
Alfred Orford

Inventor:
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by *Allen A. Davis*
Att'y.

UNITED STATES PATENT OFFICE.

FRED B. COREY, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

TRACK-SANDER.

No. 827,294.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed February 15, 1904. Serial No. 193,570.

To all whom it may concern:

Be it known that I, FRED B. COREY, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in Track-Sanders, of which the following is a specification.

My invention relates generally to pneumatic sanding devices such as are employed upon locomotives and other vehicles to sand the track for the purpose of increasing the friction between the wheels and the rails; and it has particular reference to what I may term the "ejector" type of pneumatic sanders—that is, sanders of the type in which the sand after being delivered to a sand-trap is withdrawn therefrom by a suction produced by a blast of air delivered by the nozzle located between the trap and the delivery-pipe and arranged to discharge toward the latter.

The principal object of my invention is to provide an efficient and relatively inexpensive sander in which the parts are arranged so as to produce a compact structure; and to this end it comprises certain novel features and arrangements of parts, which will be best understood by reference to the following detailed description, taken in connection with the accompanying drawings.

In said drawings, Figure 1 is a central vertical section of a sander constructed in accordance with my invention, the section being taken on the line 1 1 of Fig. 2; and Fig. 2 is a plan view of the lower half of the sander.

In both views like characters refer to like parts.

The sander comprises a shell or casing made up of an upper casting 1 and a lower casting 2, which are fastened together in any suitable manner, as by bolts passing through suitable lugs, two of which, 3 4, are shown in Fig. 2. The casing is provided with alined openings 5 and 6, suitably threaded for the reception of a sand-supply pipe and a sand-delivery pipe, respectively. A sand-trap is formed between these openings by a tray 6^a, having an outer upturned edge 7, which co-operates with the downward and inward inclined portion 9 of the upper casing to produce the trap action. The tray 6^a is suitably supported by arms 10, 11, and 12, formed integral therewith and with the lower casting 2 of the casing. From the above it

will be seen that when sand is supplied through the opening 5 it will not pass normally over the outer edge 7 of the tray 6^a. For the purpose of carrying the sand so deposited over the edge of the tray a nozzle 13 is formed on the under side of the tray directly opposite the delivery-opening 6 and in line with both said supply and delivery openings. This nozzle is supplied with compressed air through the port 14 and the opening 15. The latter is suitably threaded for the reception of an air-supply pipe and extends through the supporting-arm 12 of the tray. Suitable inlet-ports 16 16 are provided in the upper side of the casing, and when air is supplied to the nozzle 13 a suction is produced which draws air through the openings 16 with sufficient velocity to carry the sand over the outer edge 7 of the tray 6^a, and thence through the outlet-opening 6. The nozzle 13 is provided with a bell-mouth, which has the effect of allowing the air as it passes outward to expand and attain a very high velocity, and thereby produce a very strong current of air through the ports 16 16 and over the sand-tray 6^a.

It is apparent that many modifications and alterations may be made in the specific sander structure herein disclosed without departing from the spirit and scope of my invention, and I therefore do not wish to be limited to the matter actually shown, but aim to cover by the terms of the appended claims all such alterations and modifications.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A track-sander comprising a casing having inlet and outlet sand-pipe openings, a tray forming a sand-trap with said casing, an ejector-nozzle located below said tray and serving to produce a suction to draw sand through said trap, and inlet-ports in said casing for admitting air to the supply side of said trap.

2. A track-sander comprising a casing having alined inlet and outlet sand-pipe openings, a sand-trap located between said openings, and an air-nozzle in line with said openings and serving to supply air to remove the sand from said trap.

3. A track-sander comprising a casing having alined inlet and outlet sand-pipe openings, a sand-trap located between said openings, and an ejector-nozzle in line with said

openings and serving to produce a suction to draw sand from said trap.

4. A sand-trap comprising a casing having alined inlet and outlet sand-pipe openings, a
5 horizontal tray located below said inlet-opening and having an upturned edge co-operating with a downward extension of said casing to form a sand-trap, an ejector-nozzle located on the under side of said tray in
10 line with said openings and serving to produce a suction to draw sand from said trap.

5. In a track-sander, the combination of a

casing, a sand-tray located within said casing, a plurality of arms connecting said tray and casing, an air-nozzle on said tray, and 15 an air - passage communicating therewith through one of said arms.

In witness whereof I have hereunto set my hand this 12th day of February, 1904.

FRED B. COREY.

Witnesses:

BENJAMIN B. HULL,
HELEN ORFORD.