

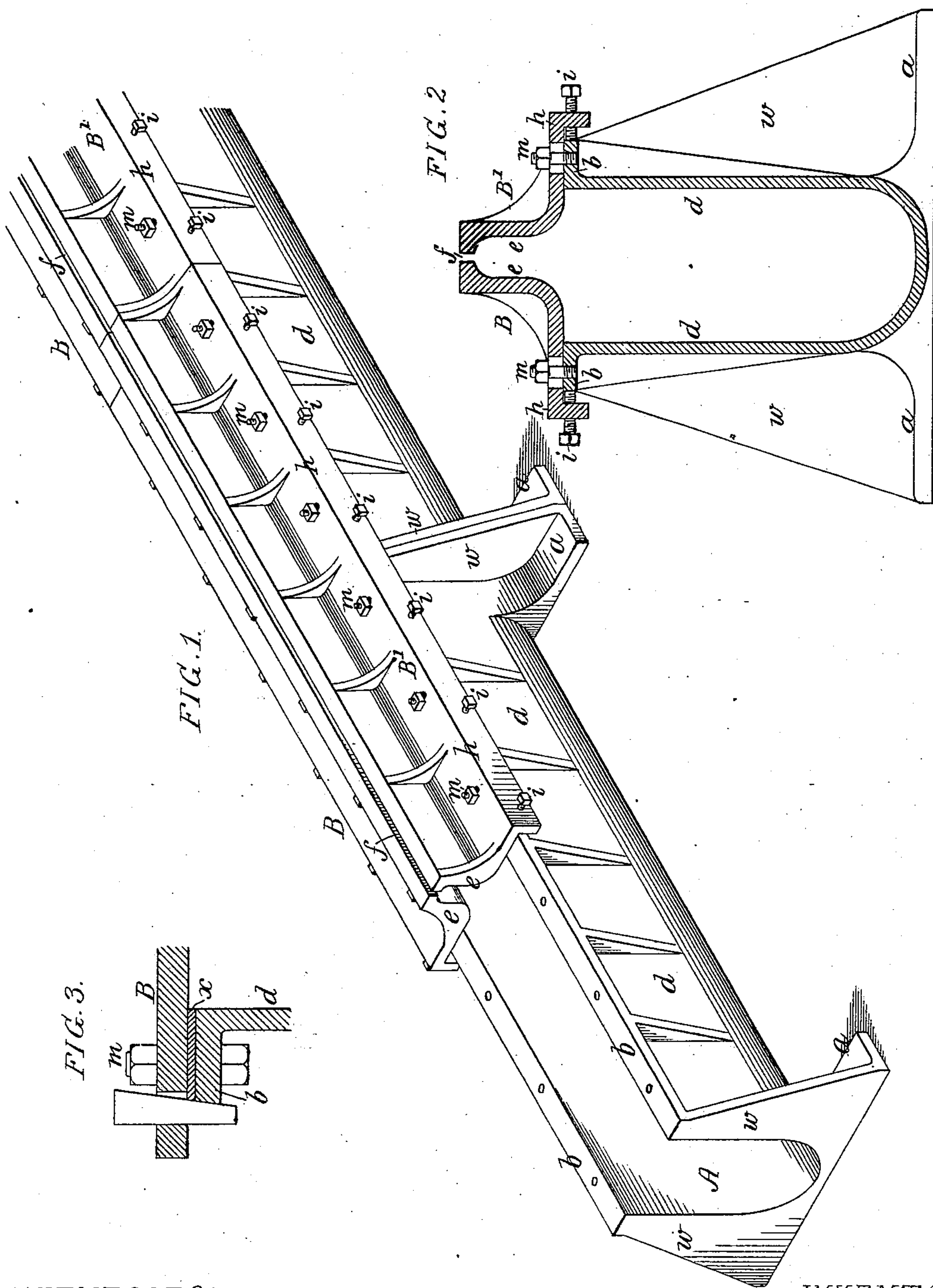
(No Model.)

E. SAMUEL.

CONDUIT FOR TRACTION ROPE RAILWAYS.

No. 282,783.

Patented Aug. 7, 1883.



WITNESSES:
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UNITED STATES PATENT OFFICE.

EDWARD SAMUEL, OF PHILADELPHIA, PENNSYLVANIA.

CONDUIT FOR TRACTION-ROPE RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 282,783, dated August 7, 1883.

Application filed April 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, EDWARD SAMUEL, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented an
5 Improvement in Conduits for Traction-Rope Railways, of which the following is a specification.

My invention relates to an improved conduit for the ropes and pulleys, &c., of a traction-rope
10 railway, the conduit being constructed in the peculiar manner fully described hereinafter, with a view to economy, ready access to the interior of the conduit, the ready renewal of parts subjected to the most wear, facilities for
15 increasing or diminishing the width of the slot at the top of the conduit, and for diminishing the noise caused by the traction-rope.

In the accompanying drawings, Figure 1 is a perspective view of my improved conduit
20 for traction-rope railways; Fig. 2, a transverse section drawn to a larger scale than Fig. 1, and Fig. 3 a view representing a modification of part of the invention.

My improved conduit consists of three main
25 parts—namely, the continuous trough A, made in sections of suitable length, and the two continuous plates B B', also made in sections. Each section of the trough A has at each end a flange, *w*, for attachment to the flange of the
30 adjoining section, and is provided with foot-plates *a*, for resting on a foundation made in a trench between the rails of the track for the reception of the conduit, and at each of the
35 upper edges of each section of the trough is a flange, *b*.

While I do not desire to confine myself to the precise shape shown of the trough, it is preferred, especially when made of cast-iron, for by making the trough open at the top and
40 with opposite parallel sides, *d d*, each section can be economically molded without cores.

Each of the plates B B' has a vertical flange or rib, *e*, the flanges of the two plates being so far apart that there shall be between them a
45 continuous slot, *f*, extending throughout the entire length of the conduit for the admission of the arm which extends from the car to the traction-rope within the conduit.

The plates B and B' are made laterally ad-
50 justable on the trough; or one of the plates may be fixed and the other adjustable, the object of

this being to increase or diminish the width of the slot, the provision preferred for this adjustment being that shown in Fig. 1, on reference to which it will be observed that each
55 plate has a flange, *h*, through which set-screws *i* pass at suitable intervals, the ends of the screws bearing against the flange *b* of the conduit, and stud-bolts *m*, attached to these flanges, passing through laterally-elongated
60 slots in the plates, so that the latter, after loosening the bolts, can be laterally adjusted, the set-screws *i* being used for the outward adjustment of the plates, and always bearing
65 against the flanges of the trough when the plates have been secured by the bolts, for while the plates may be made adjustable without the aid of the set-screws *i* and flanges *h*, I desire to make the plates perform the duty of
70 maintaining the sections of the trough in proper line with each other, and this is done by arranging the sections of the plates so as to break joints with the sections of the trough, and by causing the set-screws of the plates to
75 bear against the trough or its flanges.

The relation of the joints of the sections of the plates to those of the sections of the trough will be understood by noting the position of the end of the trough in Fig. 1 in respect to
80 that of the ends of the sections of the plates.

Important advantages of my invention are the facility with which access can be obtained to the interior of the conduit by removing one or more of the sections of either or both sets of plates B or B', and the facility with which
85 these plates can be removed without disturbing the main body of the conduit and without stopping the running of the cars, for it should be understood that the plates must be removed from time to time to make way for new ones,
90 owing to the wear to which they are subjected.

Another advantage of my invention is the facility afforded for introducing packing-strips between the flanges of the trough and the plates, as shown in Fig. 3, for the purpose of
95 changing the altitude of the plates or forming water-tight joints, and diminishing the noise caused by the rapidly-moving traction-rope. I prefer tarred felt for the packing-strips, as it is a material which has a tendency to in
100 part deaden the sound.

In place of the screws *i*, taper keys may be

used in the manner shown in Fig. 3, where the packing above referred to, and designated by the letter *x*, is shown.

It is best to make both sets of plates B B' laterally adjustable; but, as before remarked, one of them may be fixed, or may even form a permanent part of each section of the trough.

In referring to the flanges *b* of the trough and to the flanges *h* of the plates, it should be understood that the term includes lugs, which are the equivalents of flanges.

I claim as my invention—

1. The combination of the trough A, made in sections and having flanges *b b*, and the plates B B', also made in sections and arranged to break joints with the sections of the trough, with devices through the medium of which the sections of the trough are maintained in line by the plates, substantially as specified.

2. The trough A, made in sections and provided with flanges *b b*, in combination with

the plates B B', made in sections, one or both sets of said plates having flanges *h* and set-screws *i*, for bearing against the trough.

3. The combination of the flanged trough A, made in sections, with the plates B B', and with packing-strips *x*, of felt or equivalent material, interposed between the plates and flanges of the trough, as set forth.

4. The within-described cast-iron trough A, for traction-rope conduits, the said trough being made in sections, having opposite flanged sides *d d*, feet *a*, and constructed for attachment to plates B B', all substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWD. SAMUEL.

Witnesses:

HARRY L. ASHENFELTER,
HARRY SMITH.