

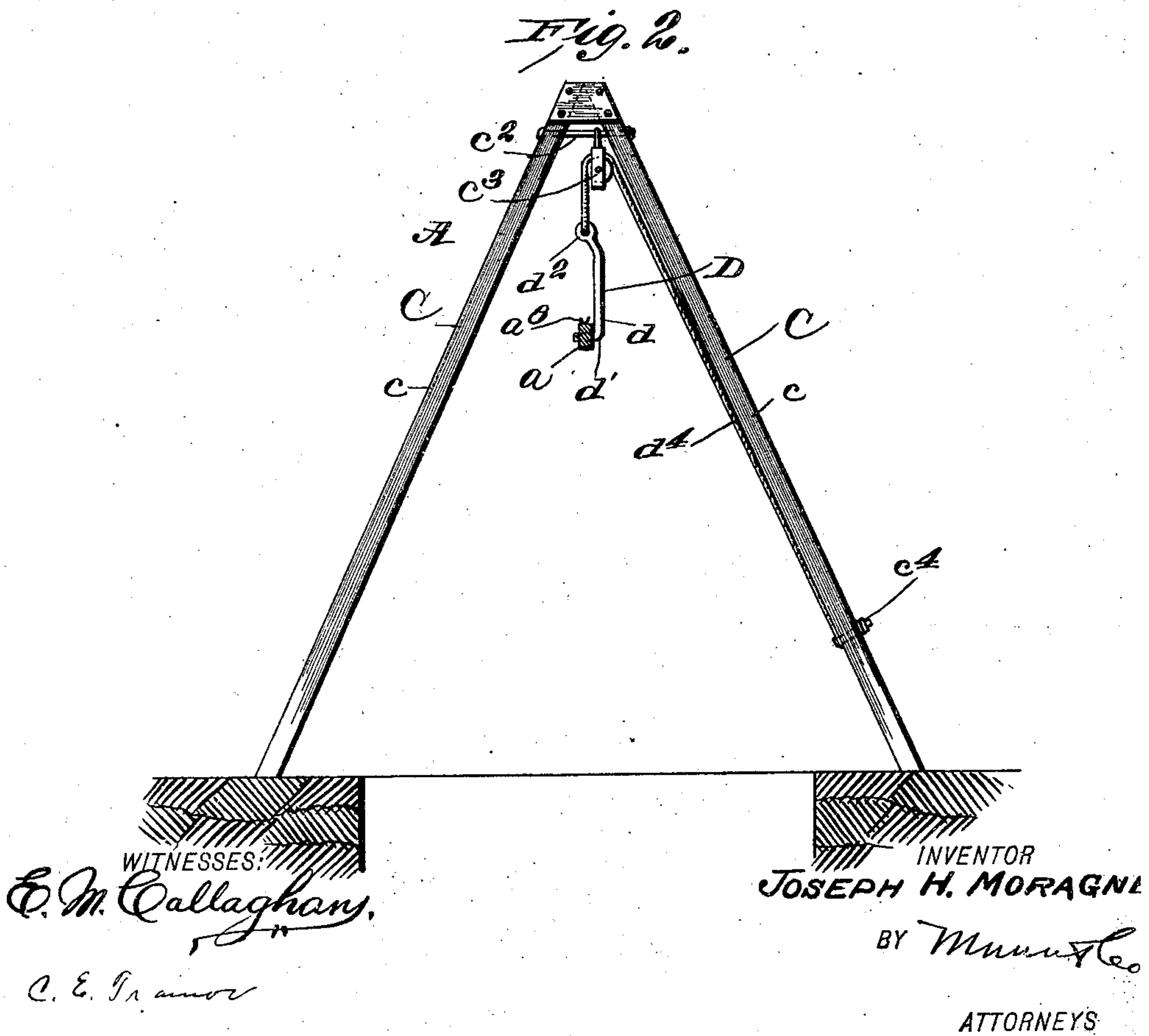
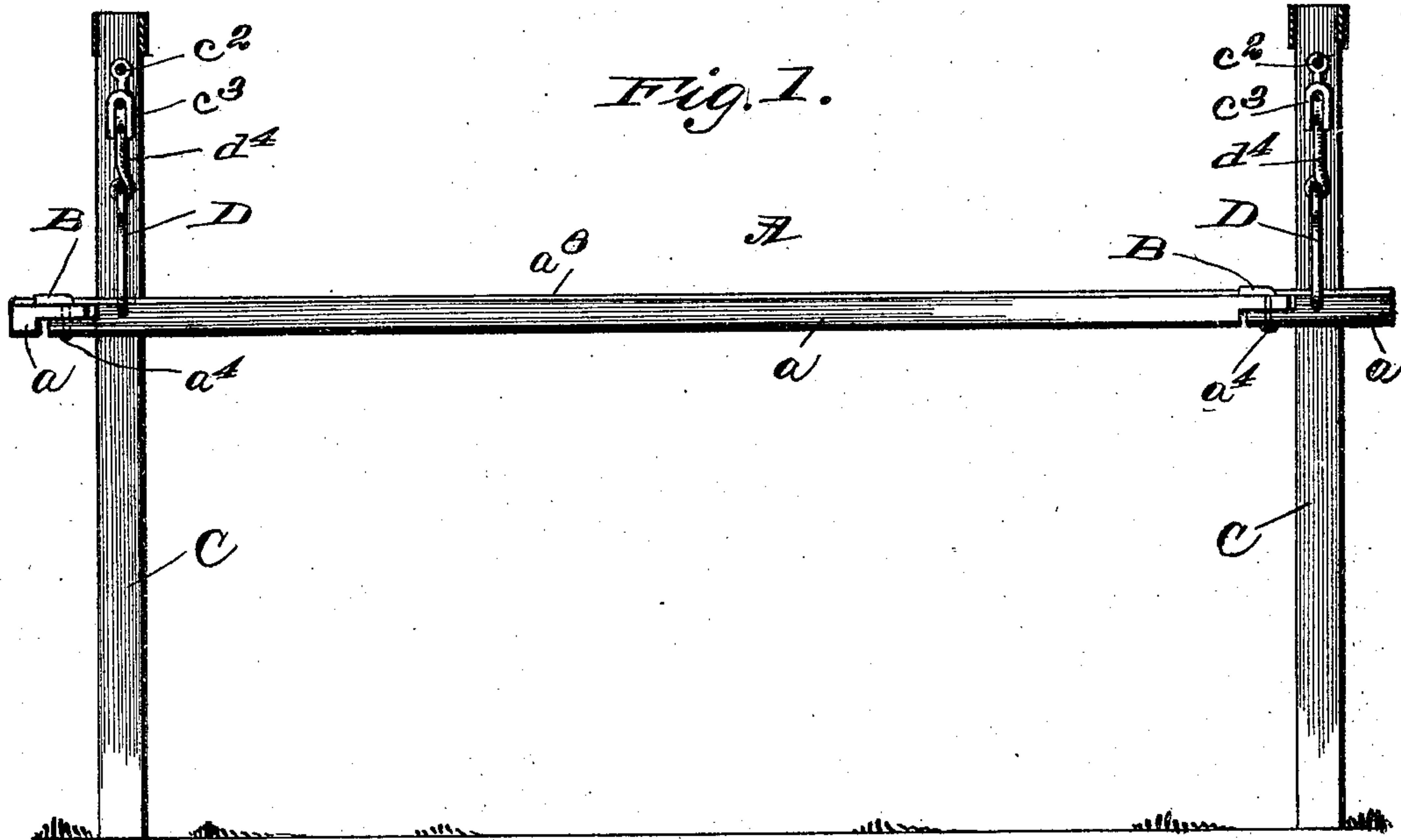
No. 847,199.

PATENTED MAR. 12, 1907.

J. H. MORAGNE.
DIRT CARRIER.

APPLICATION FILED JULY 17, 1906.

4 SHEETS—SHEET 1.



WITNESSES:
E. M. Callaghan,
C. E. Tramor

INVENTOR
JOSEPH H. MORAGNE
BY *Munn & Co.*
ATTORNEYS

No. 847,199.

PATENTED MAR. 12, 1907.

J. H. MORAGNE.
DIRT CARRIER.

APPLICATION FILED JULY 17, 1906.

4 SHEETS—SHEET 2.

Fig. 3.

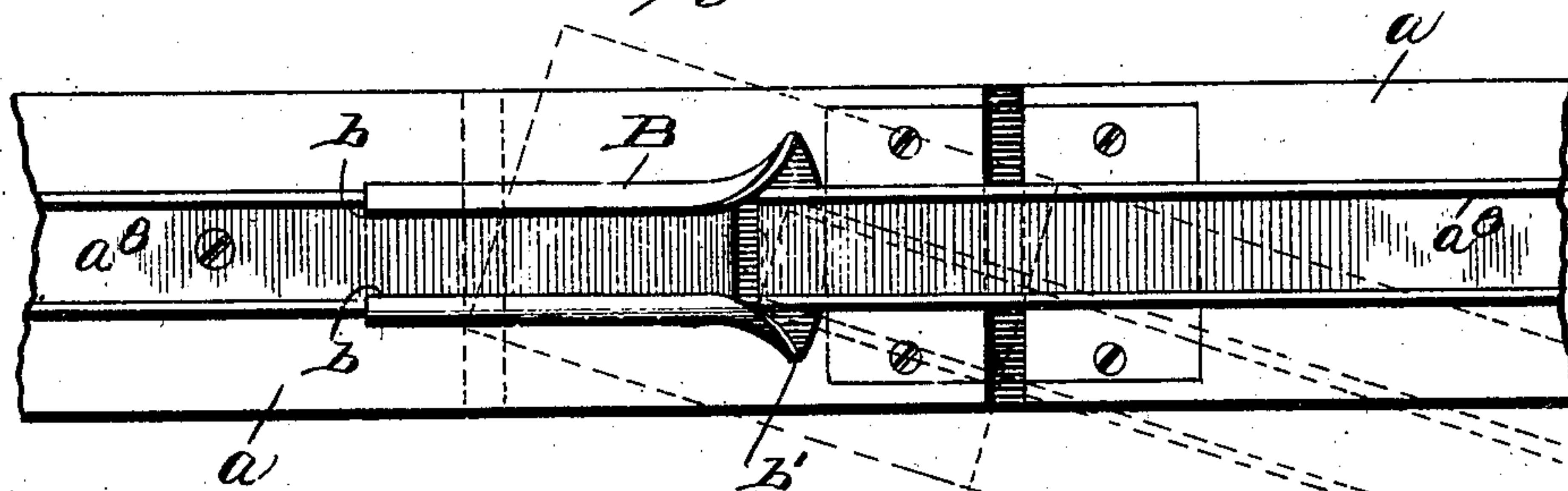


Fig. 4.

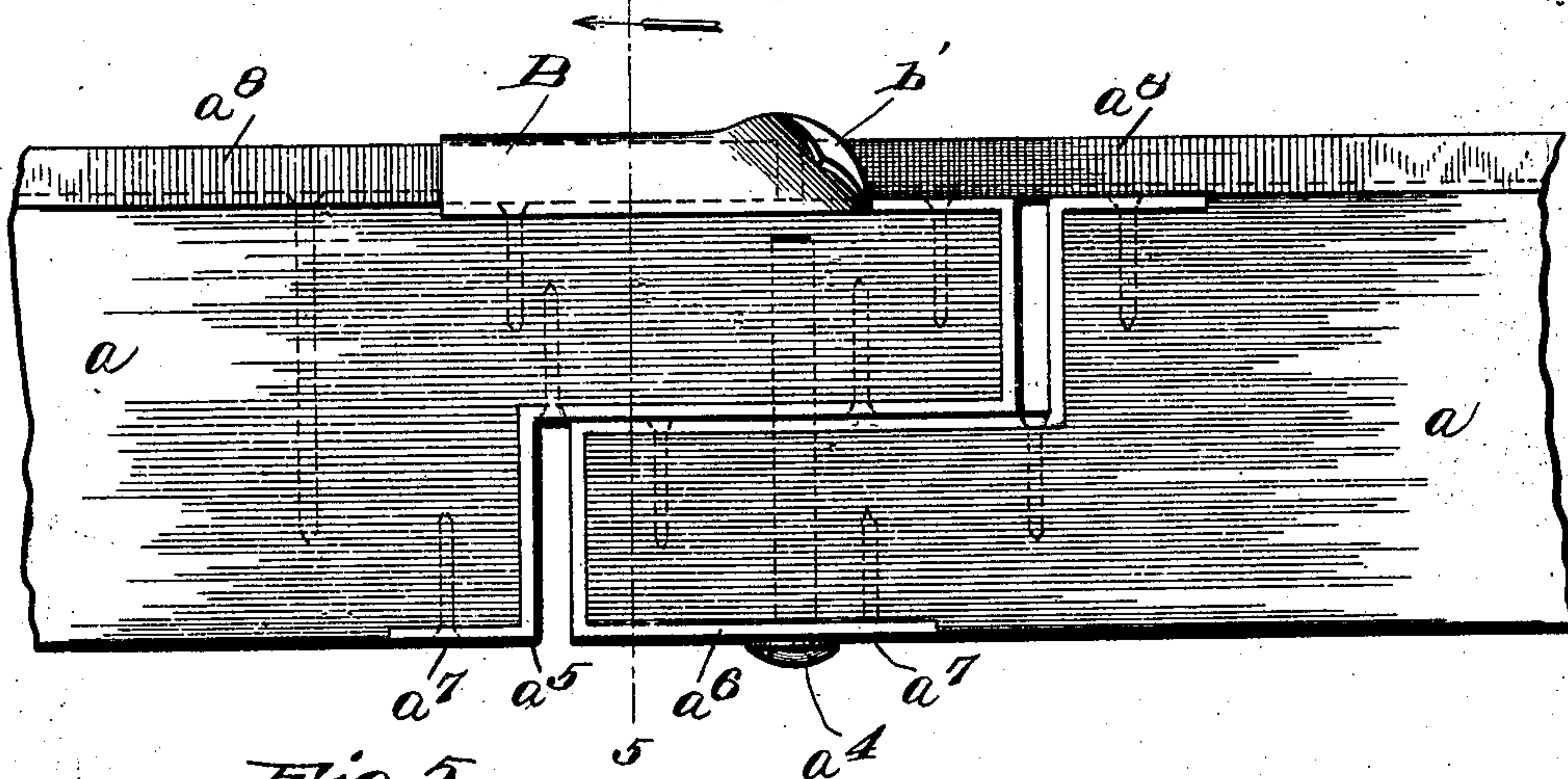


Fig. 5.

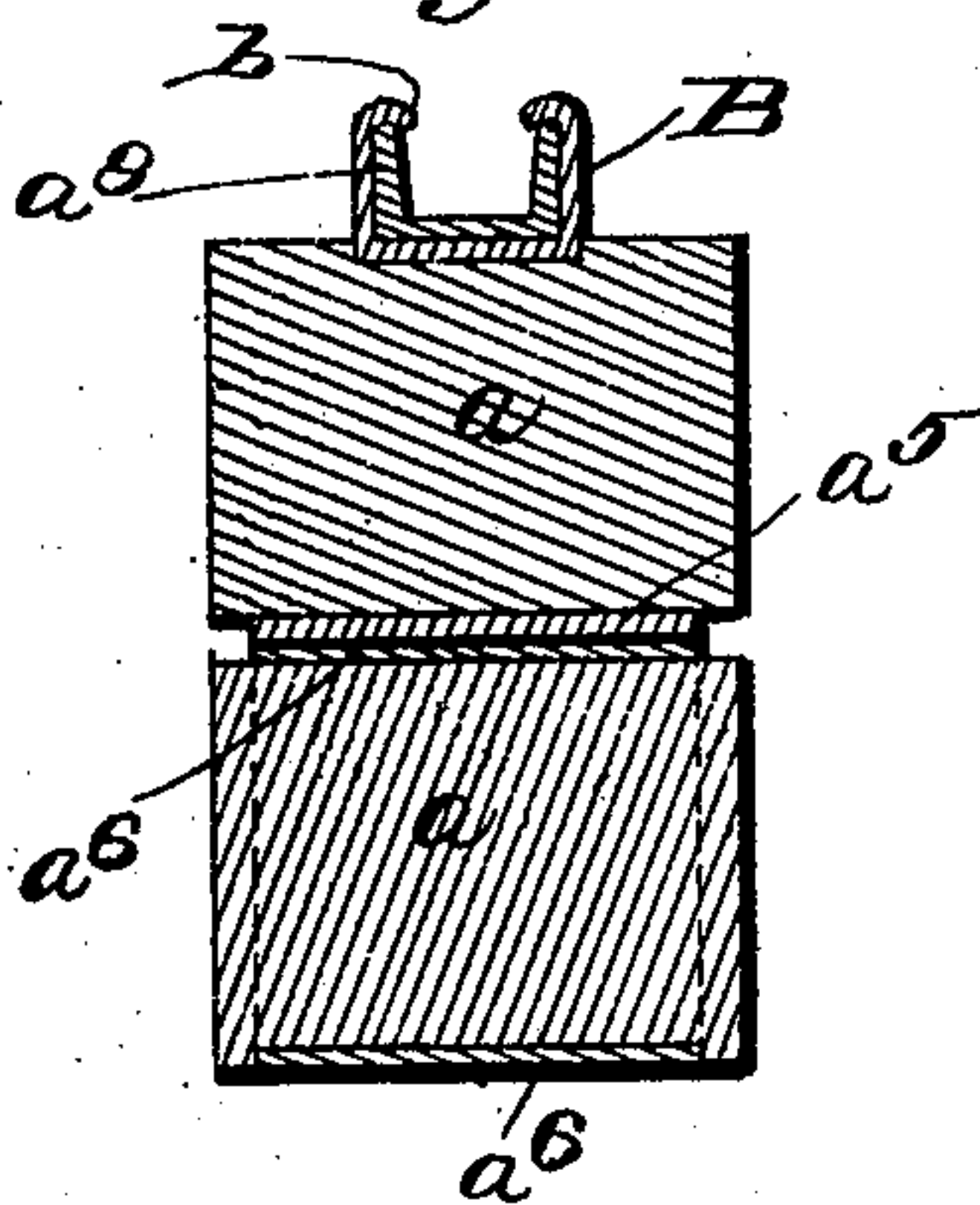
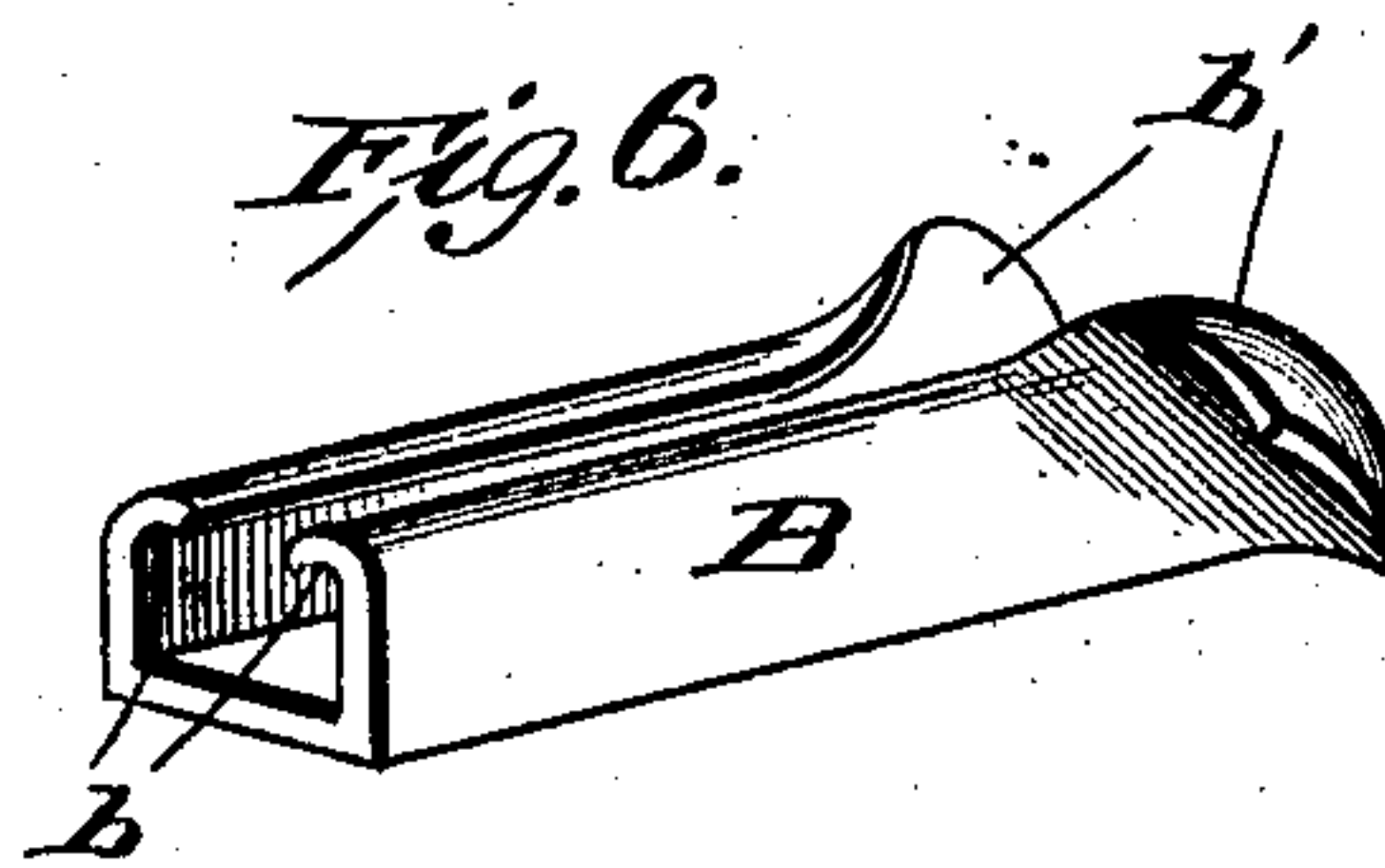


Fig. 6.



WITNESSES:
E. M. Callaghan,

C. E. Trainor

INVENTOR
JOSEPH H. MORAGNE

BY *Munn & Co.*
ATTORNEYS

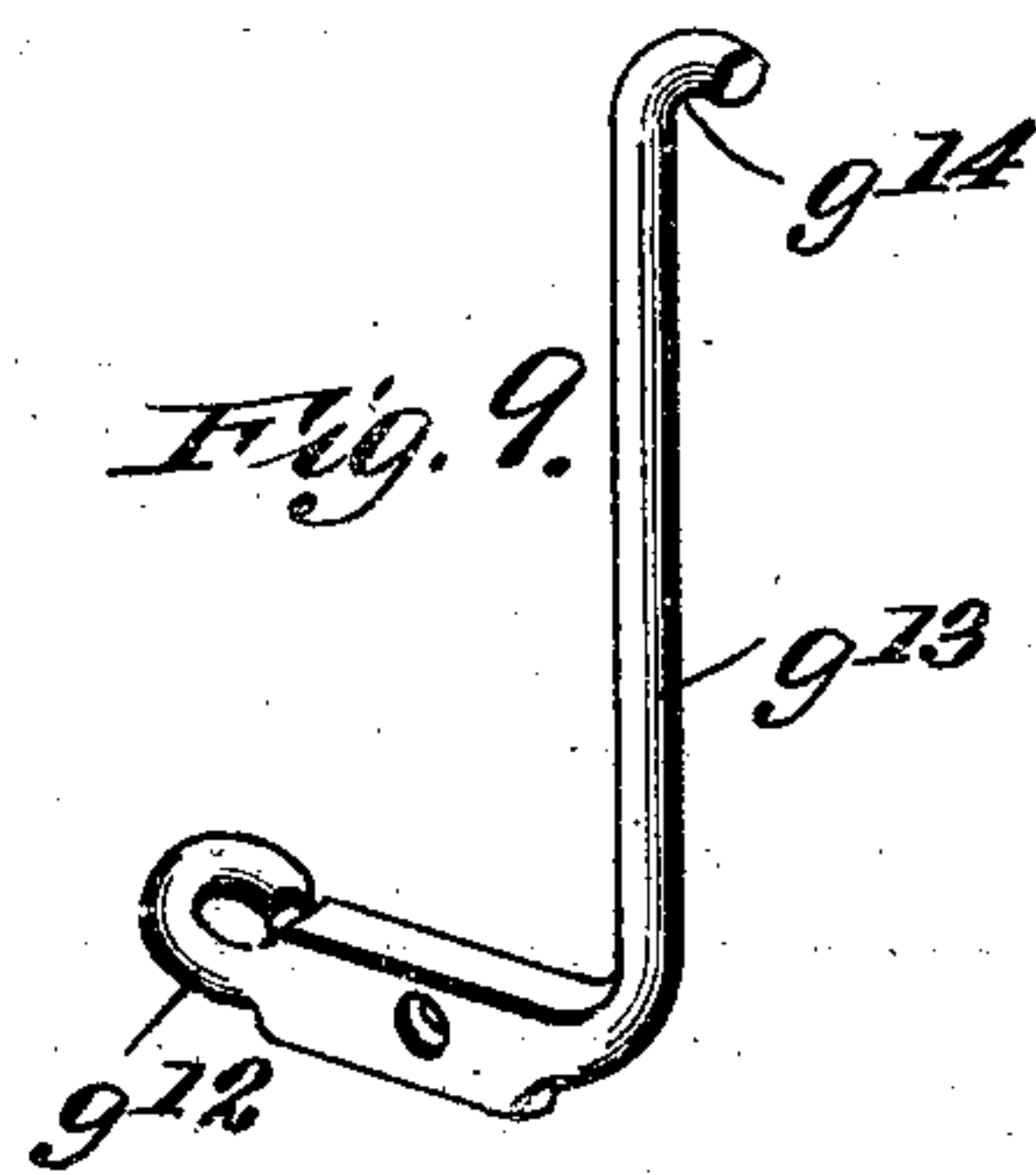
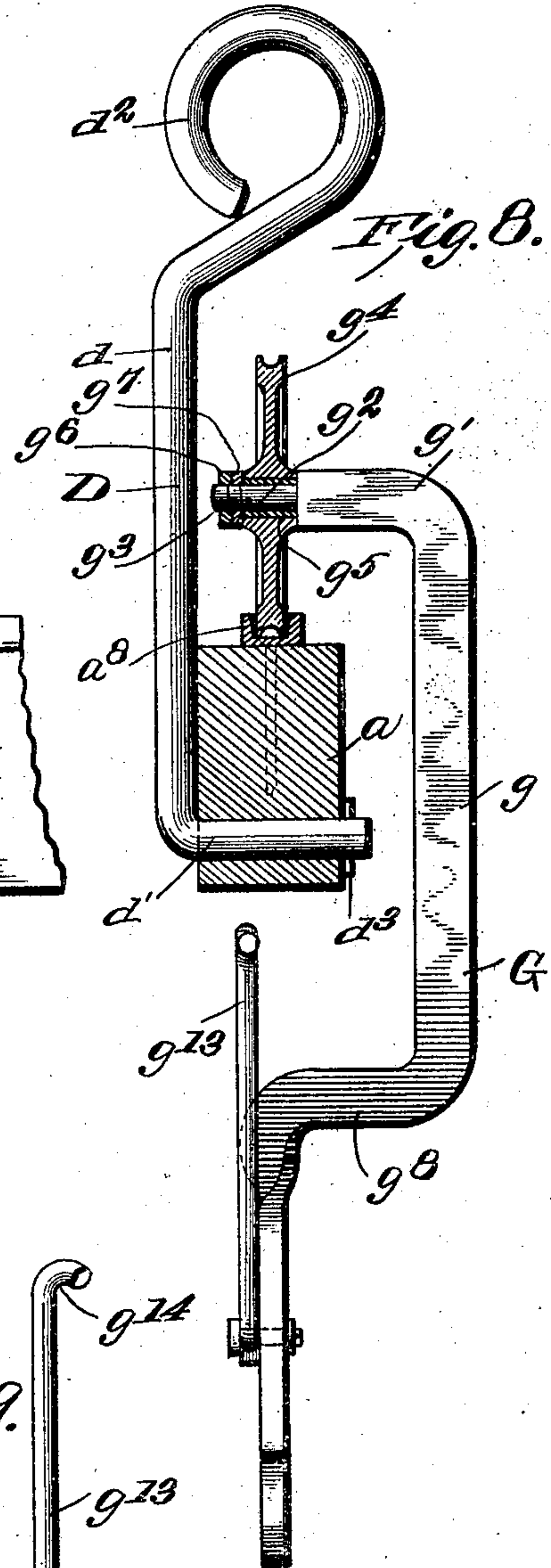
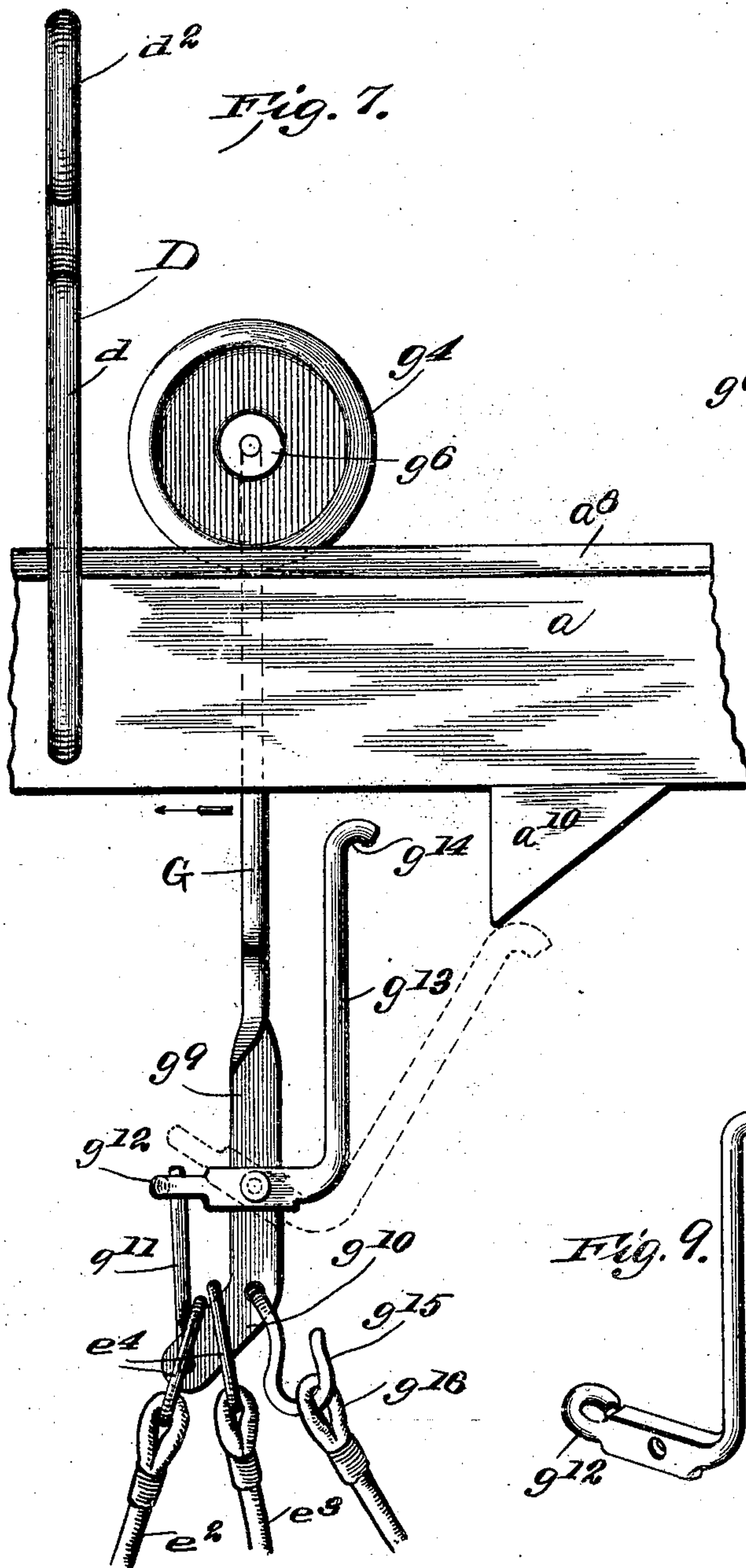
No. 847,199.

PATENTED MAR. 12. 1907.

J. H. MORAGNE.
DIRT CARRIER.

APPLICATION FILED JULY 17, 1906.

4 SHEETS—SHEET 3.



WITNESSES:
C. M. Callaghan,
C. E. Farnor

INVENTOR
JOSEPH H. MORAGNE

BY *Munn & Co.*
ATTORNEYS

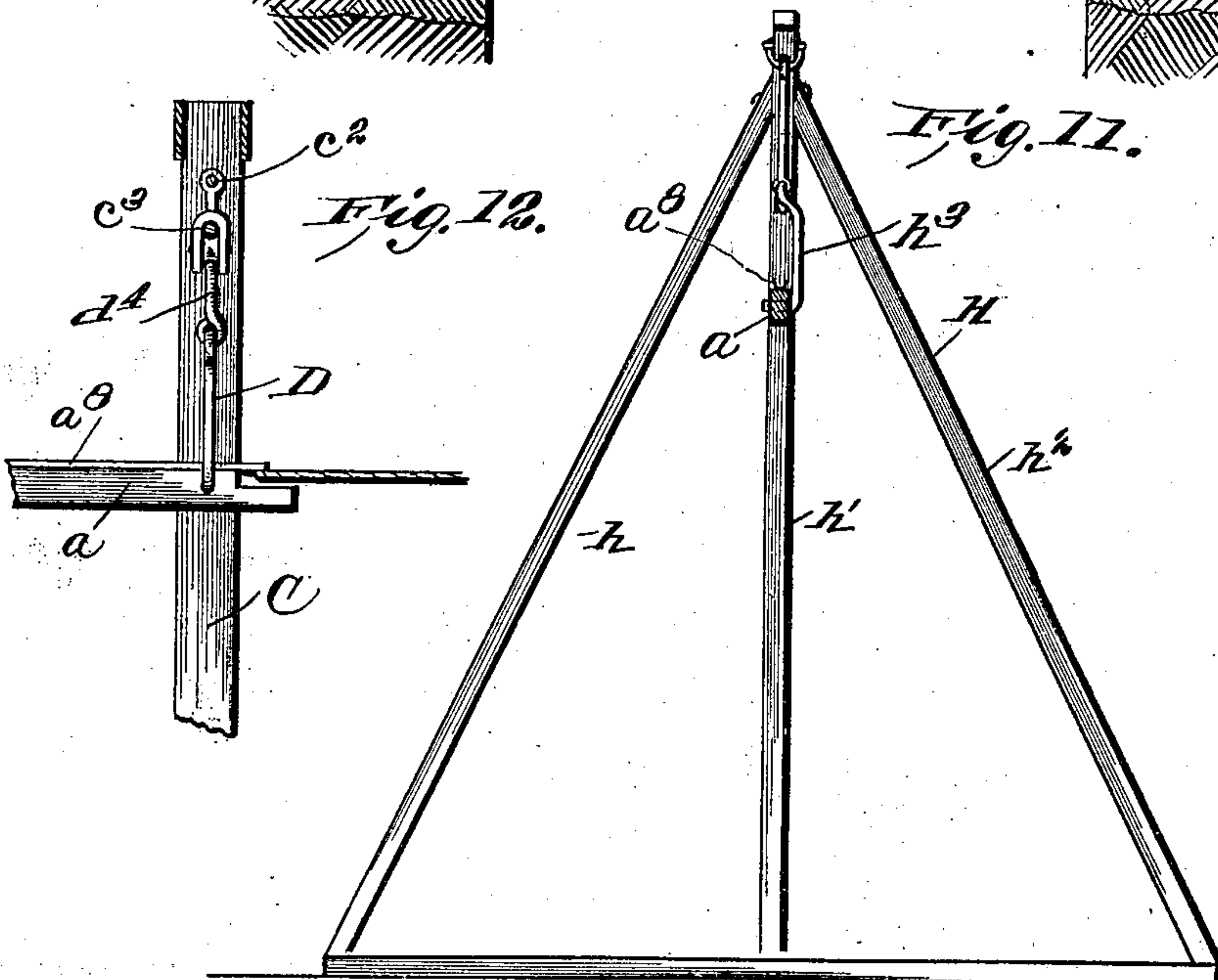
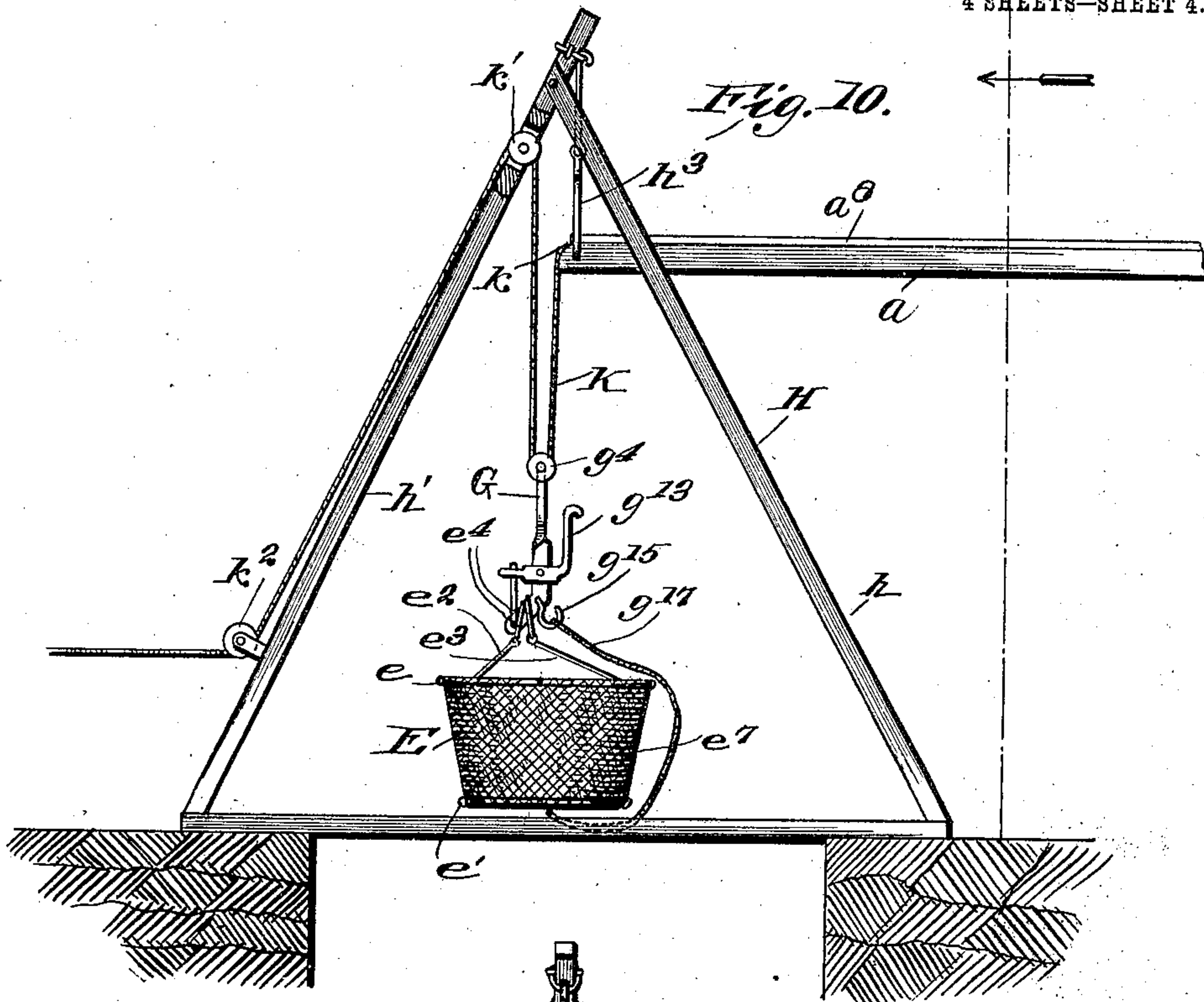
No. 847,199.

PATENTED MAR. 12, 1907.

J. H. MORAGNE.
DIRT CARRIER.

APPLICATION FILED JULY 17, 1906.

4 SHEETS—SHEET 4.



WITNESSES:
E. M. Callaghan,
C. E. Trimmer

INVENTOR
JOSEPH H. MORAGNE

BY *Munn & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOSEPH H. MORAGNE, OF HONOLULU, TERRITORY OF HAWAII.

DIRT-CARRIER.

No. 847,199.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed July 17, 1906. Serial No. 326,574.

To all whom it may concern:

Be it known that I, JOSEPH H. MORAGNE, a citizen of the United States, residing at Honolulu, Oahu, Hawaii, have invented a new and useful Improvement in Dirt-Carriers, of which the following is a specification.

My invention is an improvement in dirt-carriers, and consists in certain novel constructions and combinations of parts hereinafter described and claimed.

Referring to the drawings forming a part hereof, Figure 1 is a side view of a section of my improved track. Fig. 2 is an end view of the same. Fig. 3 is a plan view of a part of the track proper, showing the manner of connecting the beams. Fig. 4 is a side view of the same. Fig. 5 is a section on the line 5 5 of Fig. 4 looking in the direction of the arrow. Fig. 6 is a perspective view of one of the guards. Fig. 7 is a side elevation of the bucket-dumping mechanism in detail. Fig. 8 is an end view of the same. Fig. 9 is a detail perspective view of the retaining-arm. Fig. 10 is a side view of the mechanism for elevating the bucket from an excavation. Fig. 11 is an end view of the same looking in the direction of the arrow of Fig. 10, and Fig. 12 is a detail view of the manner of connecting a cable directly with my improved track.

In the practical application of my invention I provide a track A, comprising a plurality of sections a , the sections being composed of beams arranged with their widest dimension in a vertical plane. Each end of the individual sections is rabbeted, the rabbet upon one end being oppositely arranged with respect to the rabbet upon the opposite end and all of the rabbets being horizontal—that is, upon the upper and lower edges of the beams.

The beams are spaced apart longitudinally and the rabbeted portion of one beam overlaps and rests upon the rabbeted portion of the preceding beam, the rabbeted portions being pivotally connected by means of a pin a^4 , whereby the sections may have angular motion with respect to each other in a horizontal plane. Metallic shoes a^5 a^6 are arranged upon the opposing faces of the rabbeted portions, the shoes being secured to the beam by means of the nails or screws a^7 .

Each of the beams has arranged upon the upper edge thereof a section of channel-iron a^8 , the channel-iron sections abutting directly

above the pivot-pin a^4 and being spaced apart slightly from each other.

A guard B, comprising a U-shape plate, is secured beneath one end of each section and is extended beneath the end of the adjacent section. The edges of the said guard are flanged, as at b , to engage the edges of the channel-iron, while the extended portion is provided with flaring sides b' , whereby to permit angular motion of the sections with respect to each other in a horizontal plane.

The track is supported by A-frames C, comprising legs c c' , connected at their top by bolts c^2 , from which is suspended a block c^3 .

Hangers D, comprising a vertical portion d , provided with an eye d^2 at its upper end and with a horizontal portion d' , traversing an opening in the track-section adjacent to one end thereof and secured by a cotter-pin d^3 , are suspended from the A-frame by means of ropes d^4 , engaging the eye of the hanger and extending over the block to a cleat c^4 upon one of the legs of the A-frame.

By loosening the ropes from the cleats the track may be elevated or depressed with respect to the A-frame either in its entirety or at one of the ends thereof, whereby to form an incline, or at any intermediate portion.

A bucket E is provided for receiving the material, the bucket comprising top and bottom hoops e e' , to which is secured the body e^7 of the bucket, said body being preferably of flexible material, such as canvas. Bails e^2 e^3 are connected with each of the hoops, the free ends of the bails being provided with rings e^4 for a purpose to be hereinafter described.

A hanger G is provided for supporting the bucket, the said hanger comprising a vertical portion g , having at the upper end thereof a horizontal portion g' , the end of which is formed into a journal-pin g^2 for receiving a wheel g^4 , a steel bushing g^5 being arranged within the wheel for engaging the journal-pin. The outer end of the journal-pin is screw-threaded, as at g^3 , and is engaged by a nut g^6 for securing the wheel in place, a washer g^7 being interposed between the wheel and the nut. The lower end of the hanger is provided with a horizontal portion g^8 , extending to a point immediately below the center of the track, said portion being bent vertically downward, as at g^9 , at this point and forwardly to form an angular portion g^{10} .

A trigger g^{11} is pivoted in the free end of

the angular portion, the trigger being normally retained in an upright position by the engagement with the upper end thereof of an eye g^{12} upon the free end of a rocking lever g^{13} , the opposite end of said rocking lever being extended upwardly and bent to form a cam-surface, as at g^{14} . A trigger-block a^{10} is arranged upon the lower face of the track at the point where it is desired to dump the load, the said trigger-block being provided with a cam-surface, as shown in Fig. 7, whereby to engage and depress the upwardly-projecting arm of the rocking lever.

A hook g^{15} is pivoted to the hanger at the junction of the angular portion with the vertical portion, and said hook is engaged by a ring g^{16} upon a rope g^{17} , connected with the bottom of the bucket at approximately the center thereof.

When the bucket is near the point at which it is desired to unload it, the long arm of the rocking lever engages the trigger-block and is depressed thereby, thus releasing the trigger and permitting the same to be pressed outward and downward by the rings of the bails, which are inserted between said trigger and the hanger, resting upon the angular portion. When the trigger is released, it is evident that the bails will slip off of the angular portion and the bucket will fall until the rope g^{17} , connected to the bottom of the bucket, is taut, at which point the vertical axis of the bucket will be reversed, thus dumping the load.

In Fig. 10 I have shown mechanism for elevating the bucket from an excavation and placing the same on the track. The end of the track at this point is supported by a tripod H, comprising legs h h' h^2 , the track being supported by a hanger h^3 , depending from one of the legs. A hoisting-rope K is secured to one end of the track at k , passing downwardly over the wheel g^4 of the hanger and from thence upwardly and over a block k' at the top of the tripod and from thence under a block k^2 to a suitable power device. By this mechanism when traction is made upon the free end of the rope K the bucket is elevated until the hanger-wheel reaches the top of the track, when it is rolled off the rope into the channel of the channel-iron. In Fig. 12 I have shown mechanism whereby the bucket may be transferred from a cable to my improved track, it being only necessary to attach the end of the cable to the end of the channel-iron in such manner that the hanger-wheel passes directly from the cable to the track.

In operation the rings of the bails are placed upon the angular portion of the hanger, the trigger is elevated and engaged by the eye of the rocking lever, after which the bucket is filled and elevated to the track. When the point at which it is desired to dump the load is reached, the trigger-block

depresses the upwardly-extending arm of the rocking lever, releasing the trigger and the bails and permitting the bucket to drop until the rope secured to the bottom thereof becomes taut, when the vertical axis of the bucket is reversed and the load is dropped therefrom. It is evident that either a curved or straight rim wheel could be used with my improved track, the curved rim being preferable when it is desired to lift the bucket from the excavation or to use a cable in connection with the track. The provision of the guard at the joint of the channel-iron section prevents the derailment of the hanger-wheel, while at the same time a comparatively free angular movement of the sections upon each other is permitted.

I claim—

1. In dirt-carriers and in combination, a track comprising a plurality of beams having oppositely-rabbeted ends, the rabbeted portion of one beam overlapping and resting upon the rabbeted portion of the preceding beam, the beams being spaced apart longitudinally whereby to permit angular motion with respect to each other in a horizontal plane, metallic shoes on said rabbeted portions, a pivot-pin traversing said rabbeted portions, a section of channel-iron secured to the upper edge of each beam, said sections abutting directly above the pivot-pins, a guard comprising a section of channel-iron seated beneath the end of one of said sections and extending beneath the end of the adjacent section, said extended portion being flared outwardly whereby to permit angular movement of the sections in a horizontal plane, means for supporting said track, and means for adjusting said track with respect to said supporting means.

2. In dirt-carriers and in combination, a track comprising a plurality of beams arranged in longitudinal alinement and connected by a rabbit-joint, said beams being spaced apart whereby they may have angular movement in a horizontal plane, a section of channel-iron upon the upper edge of each of said beams, a guard comprising a U-shaped plate beneath the end of each of said sections and extending beneath the end of the adjacent section, said guard having flanged sides for engaging the first section, and having the extended portion flaring outwardly whereby to permit angular movement of the sections in a horizontal plane.

3. In dirt-carriers and in combination, a track comprising a plurality of beams arranged in longitudinal alinement, and pivotally connected for angular movement in a horizontal plane, a section of channel-iron upon the upper edge of each of the beams, the sections abutting directly above said pivotal connection, and a guard comprising a U-shaped plate beneath the end of each section and extending beneath the end of the adja-

cent section, the extended end of the guard flaring outwardly whereby to permit angular movement of the sections in a horizontal plane.

5 4. In dirt-carriers and in combination, a track comprising a plurality of beams arranged in longitudinal alinement and pivotally connected for angular movement in a horizontal plane, a section of channel-iron
10 upon the upper edge of each of the beams, said sections abutting directly above the point of pivotal connection, and a guard between said sections.

5 5. In dirt-carriers, a track comprising a plurality of sections pivoted at their ends for horizontal motion with respect to each other, a channel-iron on the upper edge of the sections, the channel-iron being jointed in alinement with the pivotal connection, and means
20 for supporting said track.

6. In dirt-carriers, a track comprising a plurality of sections pivoted at their ends for horizontal movement with respect to each other, means for supporting the track, means
25 for elevating and depressing the track with respect to the said supporting means, and a channel-iron arranged on the upper edge of the sections, the channel-iron being jointed in alinement with the pivotal connection.

30 7. In dirt-carriers, a track comprising a plurality of sections pivoted at their ends for horizontal movement with respect to each

other, means for supporting the track, and means for raising and lowering the track with respect to the supporting means. 35

8. In dirt-carriers, a track comprising a plurality of sections jointed at their ends for horizontal movement, a plurality of **A**-frames for supporting the track, and means for raising and lowering the track with respect to
40 the frames.

9. In dirt-carriers, a track comprising a plurality of sections pivoted by their adjacent ends for horizontal movement with respect to each other, a hanger for the track
45 comprising a bracket having a lower horizontal portion engaging the track, and an eye at its upper portion, a plurality of **A**-frames, blocks supported by the **A**-frames, and a rope connected with the eye of the hanger
50 and passing over the block.

10. In apparatus of the class described, a track comprising a plurality of alined sections, means whereby said sections may have angular movement in a horizontal plane
55 with respect to each other, means for supporting the track, and means for elevating and depressing the individual sections with respect to the supporting means.

JOSEPH H. MORAGNE.

Witnesses:

MABEL N. TAYLOR,
SARAH B. DEVERILL.