

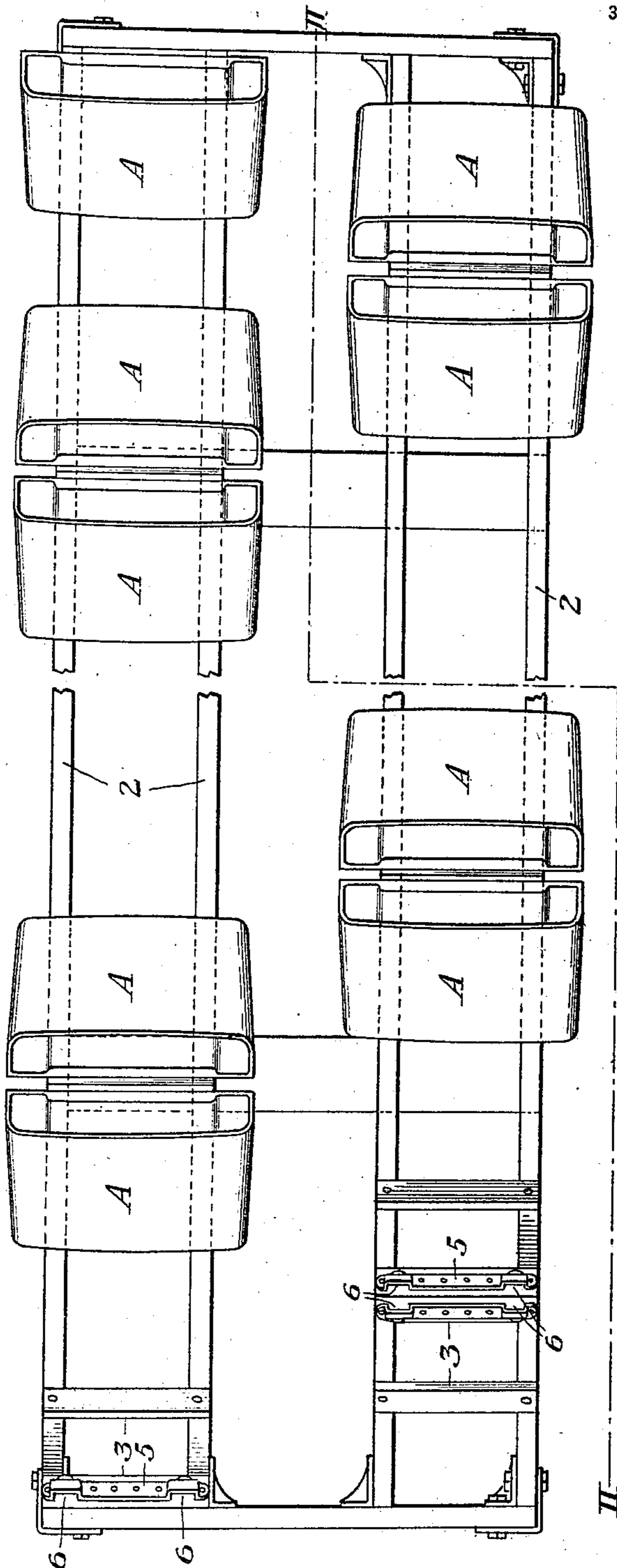
J. S. JOBE, J. DIXON, AND A. E. ARROTT.
METHOD OF AND APPARATUS FOR COATING CASTINGS.
APPLICATION FILED JAN. 30, 1920.

1,412,057.

Patented Apr. 11, 1922.

3 SHEETS—SHEET 1.

Fig. 1.



Inventors
John S. Jobe,
John Dixon,
Albert E. Arrott,

By *Bakerell, Byrnes & Parmelee,*
Attorneys

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Fig. 2.

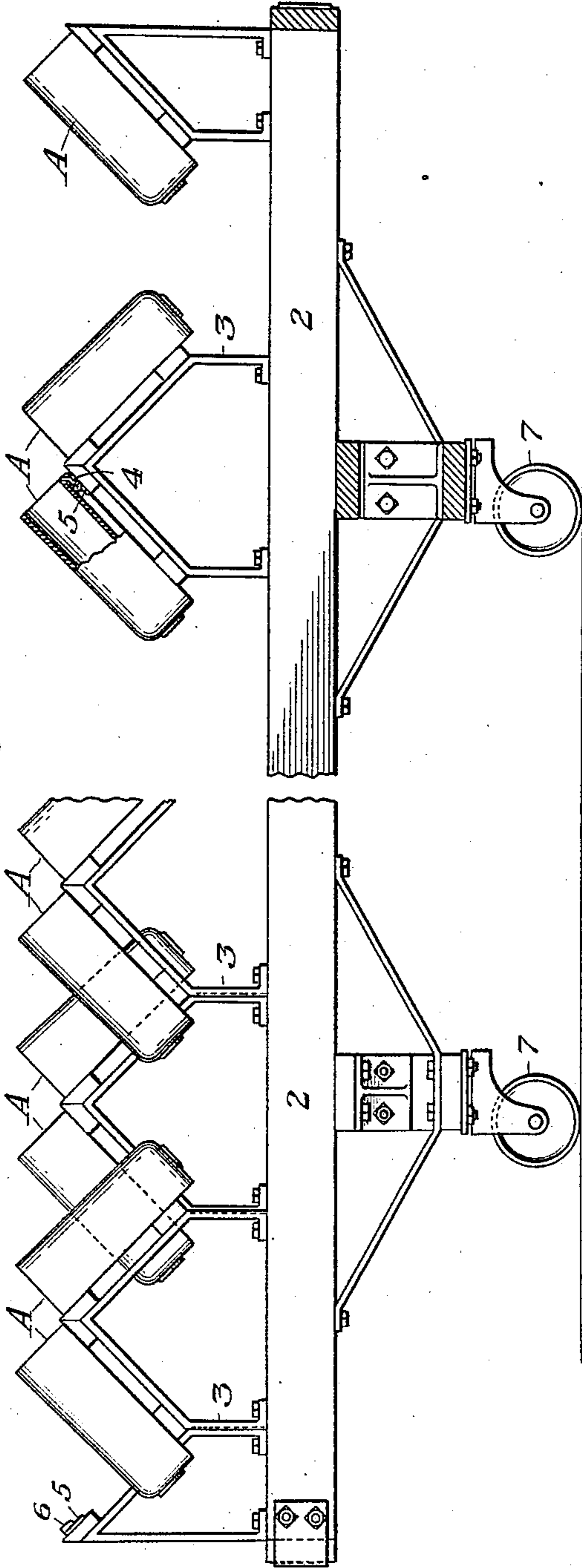


Fig. 3.

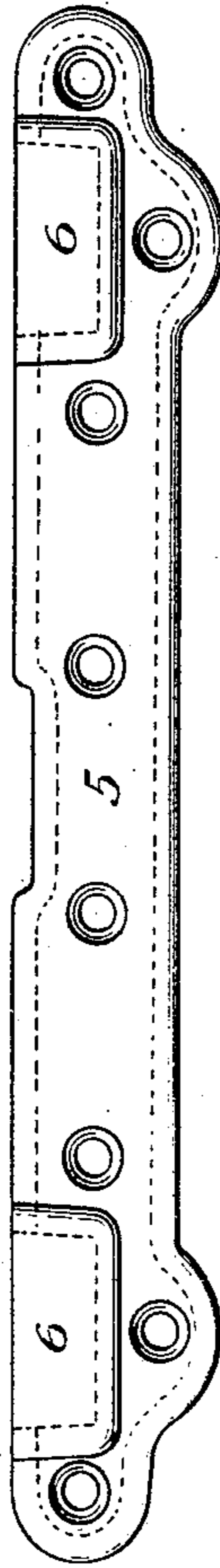
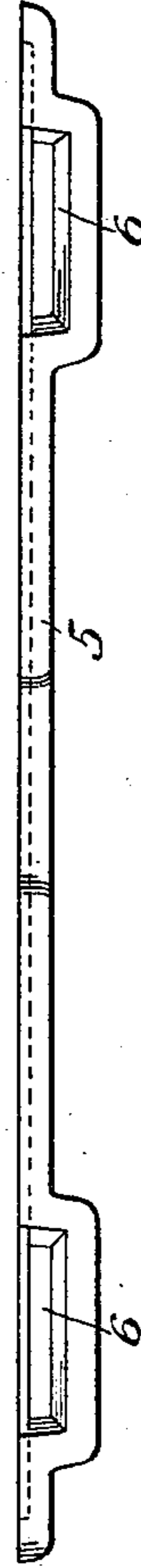


Fig. 4.



Inventors

John S. Jobe,
John Dixon,
Albert E. Arrott

By

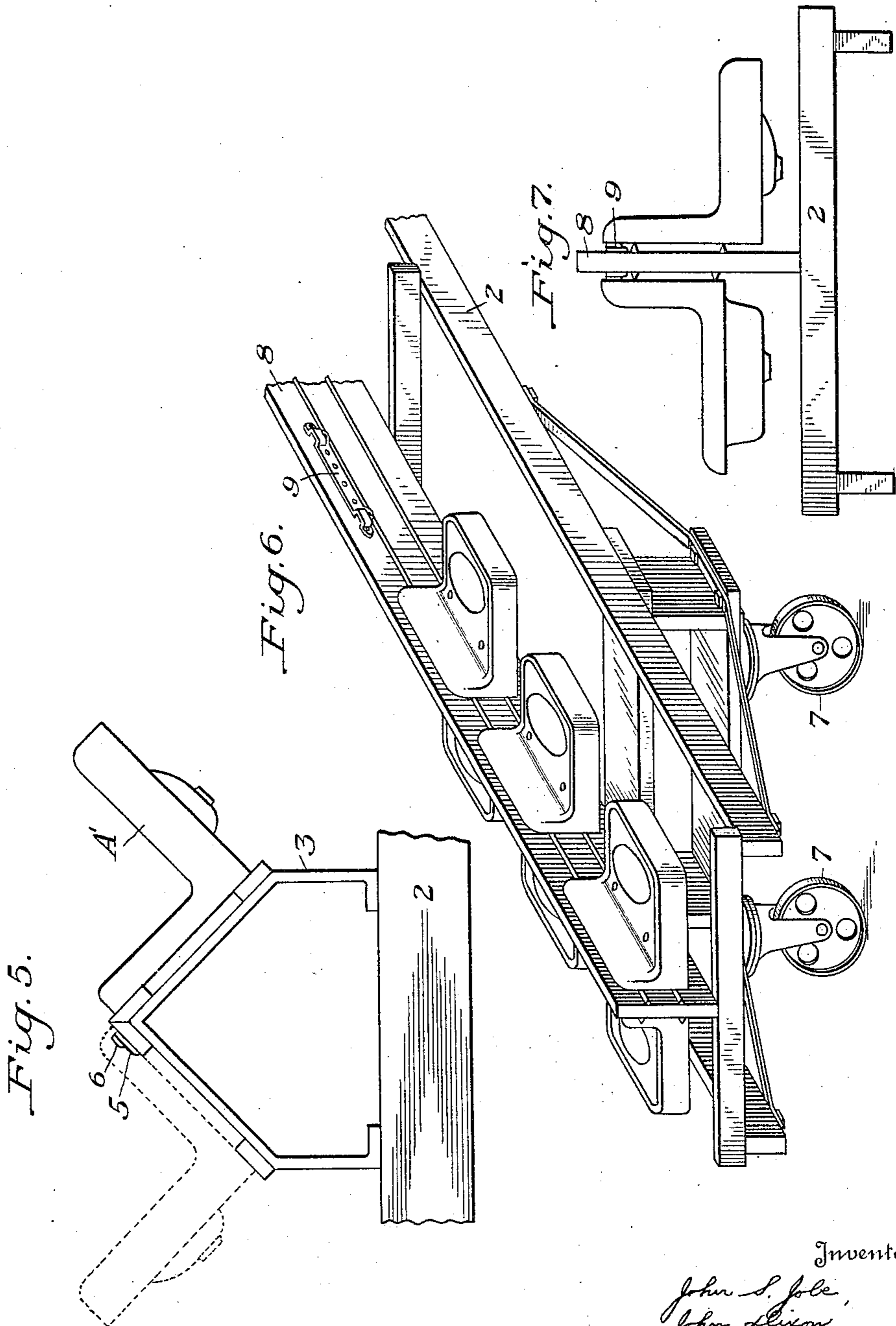
Baker, Byrnes & Parmelee
Attorneys

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3 SHEETS—SHEET 3.



Inventors
John S. Jobe,
John Dixon,
Albert C. Arrott,
By *Robinson, Byrnes & Larnelle*
Attorneys

UNITED STATES PATENT OFFICE.

JOHN S. JOBE, OF ROCHESTER, JOHN DIXON, OF MONACA, AND ALBERT E. ARROTT, OF PITTSBURGH, PENNSYLVANIA, ASSIGNORS TO UNITED STATES SANITARY MANUFACTURING COMPANY, OF PITTSBURGH, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

METHOD OF AND APPARATUS FOR COATING CASTINGS.

1,412,057.

Specification of Letters Patent. Patented Apr. 11, 1922.

Application filed January 30, 1920. Serial No. 355,231.

To all whom it may concern:

Be it known that we, JOHN S. JOBE, JOHN DIXON, and ALBERT E. ARROTT, all citizens of the United States, residing, respectively, at Rochester, Beaver County, Pennsylvania, Monaca, Beaver County, Pennsylvania, and Pittsburgh, Allegheny County, Pennsylvania, have invented a new and useful Improvement in Methods of and Apparatus for Coating Castings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view partly broken away of apparatus embodying our invention.

Figure 2 is a sectional elevation on the line II—II of Figure 1.

Figures 3 and 4 are detail views of one of the supporting devices.

Figure 5 is an end elevation of a portion of the apparatus and showing its use for supporting a different article, and

Figure 6 is a perspective view showing a different form of apparatus, and

Figure 7 is an end view of the device shown in Figure 6.

Our invention has relation to a method of and apparatus for use in the coating of castings. The invention has been particularly designed for use in connection with the manufacture of enameled metal flush-tank bodies, lavatories, sinks, etc., and is designed to provide a method and means by which the time and labor involved in the coating operations are greatly reduced.

Heretofore, in applying first coatings to articles of this character, the castings have been brought from the cleaning room to the coating room. They are then placed on end in position to enable a portion of their surfaces to be coated by the use of an air brush or "gun." The castings are then turned over so that the remaining surfaces to be coated can be reached and coated. The castings are heavy and this work has been very hard upon the operator, and it has been difficult to obtain operators to perform the work. By the use of our invention the operator who does the coating is relieved entirely from all work in connection with lift-

ing the castings. We also provide for handling a plurality of castings at the same time and thus greatly increase the output.

The nature of our invention will be best understood by reference to the accompanying drawings which will now be described in which we have shown preferred embodiments thereof, it being premised, however, that the apparatus employed may be varied within the spirit and scope of the invention as defined in the appended claims.

In these drawings the numeral 2 designates a suitable support, preferably in the form of a wheeled truck which can be readily moved from place to place. On this truck are a plurality of supports 3 extending transversely of the truck and of generally triangular form. In Figures 1 and 2 we have shown two sets of these supports extending parallel with each other longitudinally of the truck, the supports on the two sets being staggered with respect to each other, but it will be understood that this arrangement may be varied as may be desired and that a greater or less number of the supports may be employed, arranged upon the truck in various ways.

Each one of the supports (except the end ones, which are of single form) is provided with suitable means for supporting thereon two of the castings A which are to be coated. In Figures 1 and 2 we have illustrated the coating of cast flush tank bodies which are provided with hooks 4, such, for instance, as are shown in the Shaffer Patent No. 1,261,446, dated April 2, 1918. To receive these hooks each side of each support is provided near the top with a transversely extending plate or cleat 5 having sockets 6 for engagement with the hooks. The cleats can be of the same pattern as those used for supporting the tanks when they are installed. In this manner two of the castings can be held on each of the supports 3, one on each side thereof, in the inclined positions as shown in the drawings.

In operation the castings, after being cleaned in the cleaning room are placed on the trucks in the positions shown and the trucks are then carried to the coating room. To facilitate moving the trucks, they may be provided with castor wheels 7. It will

readily be seen that both the interior and exterior surfaces of the articles to be coated are exposed so that both surfaces may be coated without in any way lifting or handling the castings. The operator with the usual air brush or "slush gun" first coats the interior of each casting and then the exterior. The trucks with the coated castings thereon can then be taken to the baking ovens.

In Figure 5 we have shown how lavatories may be placed on the same supports for coating, with all surfaces thereof which require coating exposed.

By reason of our invention the operator who does the coating is entirely relieved of all work of handling the castings. This not only makes his work much easier, but greatly increases the output of the factory. The castings are sufficiently spaced on the supports so that the operator can readily reach them with his brush, this also being facilitated by the staggered arrangement of the two sets of supports.

It will be readily understood that the particular form of supports can be widely varied, the essential thing being that they shall be provided with means whereby the castings can be held in position to be coated without necessity for handling them during the coating operation. It is also preferred that the supports shall be of a portable character so that they can be moved from place to place with the articles thereon preparatory to and after coating. It is not essential that all articles shall be held in inclined positions. For instance, in Figures 6 and 7 we have shown a support which may be used in coating sinks and lavatories which do not require to be coated on the back and underside. In this figure, 8 designates a supporting member extending longitudinally of the truck, and having supporting cleats 9 on opposite sides, similar to the cleats 5 before described and with

which the usual back hooks on the lavatories and sinks may be engaged, as shown.

We claim:

1. The herein described method of coating castings, such as flush-tank bodies, sinks, lavatories, and the like, having both exterior and interior surfaces to be coated and provided with means for supporting them in use, comprising placing a plurality of the castings to be coated upon a movable support having means for cooperation with the means on the castings to hold said castings in position on the support in substantially the manner in which they are supported in use and with both the exterior and interior surfaces to be coated exposed and accessible for the coating operations, and coating such surfaces while so supported and without changing their positions during coating, substantially as described.

2. Apparatus of the character described, comprising a supporting member having a plurality of supports thereon, each of said supports having a plurality of supporting members thereon arranged to support a plurality of castings in spaced apart positions, substantially as described.

3. Apparatus of the character described, comprising a movable support having a supporting member thereon, said member having means for engaging and holding a plurality of castings in spaced apart positions thereon, substantially as described.

4. Apparatus of the character described, comprising a movable support having a plurality of supporting members thereon, each of said members having means for engaging and supporting a plurality of castings thereon, substantially as described.

In testimony whereof, we have hereunto set our hands.

JOHN S. JOBE.
JOHN DIXON.
ALBERT E. ARROTT.