Aug. 3, 1965 L. T. SANCHEZ 3,197,826

SUPPORT FOR ASSISTING IN INVERTING ARTICLES

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FIG. 2.

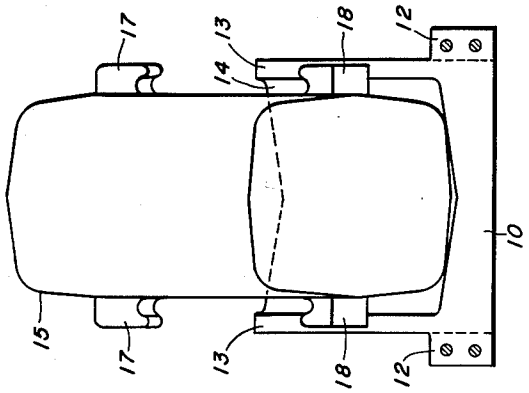
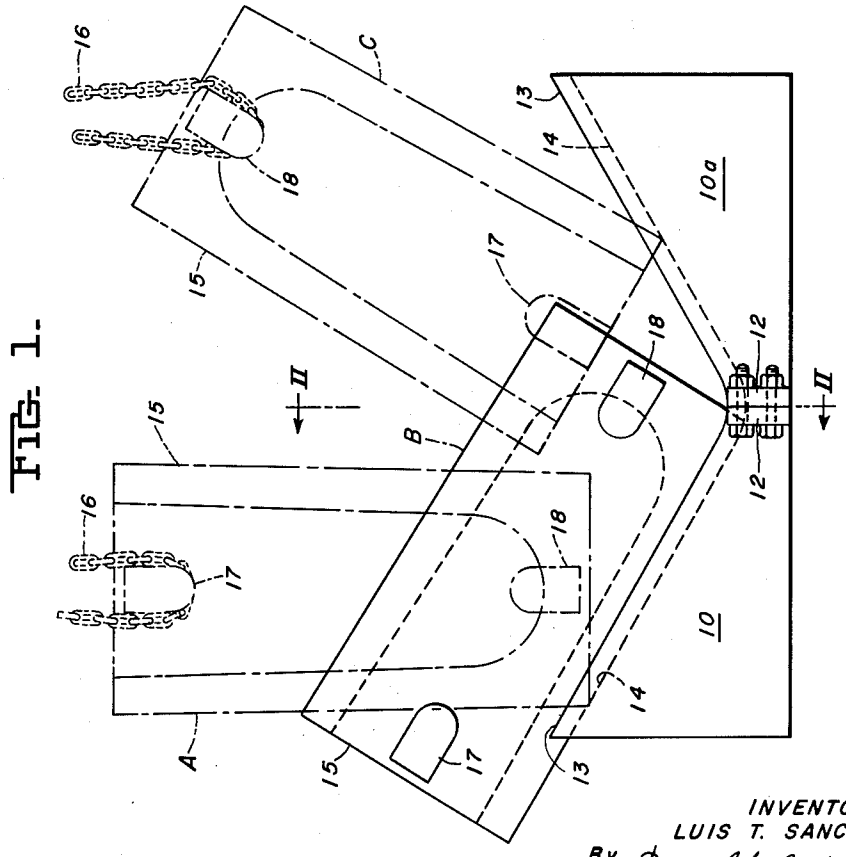


FIG. 1.



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SUPPORT FOR ASSISTING IN INVERTING ARTICLES

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1 Claim. (Cl. 22—95)

This invention relates to a support for assisting in inverting a tall massive article, such as an ingot mold.

An object of the invention is to provide a support adapted to receive and tilt an article delivered by an overhead crane, enabling the crane to pick up the article from the opposite end in inverted position.

A further object is to provide a support of the foregoing type which is of simple construction, free of moving parts, and readily formed of two similar castings.

In the drawing:

FIGURE 1 is a side elevational view of the support showing an ingot mold in three different positions thereon; and

FIGURE 2 is a vertical section on line II—II of FIGURE 1.

The support of my invention includes a body formed of two similar metal castings **10** and **10***a*, each of trapezoidal shape when viewed in side elevation. The castings have outwardly projecting lugs **12** at their narrow ends, which lugs are bolted together to join the two castings in a unitary structure. The outside edges of the castings have upstanding flanges **13** which define a shallow trough **14** on the upper face of the body. The trough slopes downwardly from both ends of the body toward the middle at angles of about 30° from the horizontal, although the exact angle of slope is not critical.

In operation, an overhead crane (not shown) carries a tall massive article **15**, such as a big-end-up ingot mold, to a position A in which one of the lower edges of the article engages trough **14** adjacent one of its upper ends. The article is suspended from chains **16** which are looped around lifting lugs **17** near the top of the article. The crane lowers the article which slides down trough **14** to position B. In this position the article is tilted on its side with its lower edge at the low point of the trough. Flanges **13** guide the article laterally as it moves along the trough. Chains **16** are disengaged from lugs **17** and engaged with lugs **18** near the bottom. The crane next lifts the article while its former upper edge slides down trough **14** to the low point and up the trough on the other side to position C. Thereafter the crane can carry away the article inverted from its original position.

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In the example of a big-end-up ingot mold, it is difficult to cool and clean the mold and apply a coating with the mold in its normal position. Hence there is a need to invert the mold after each use. The support of the present invention enables the mold to be inverted without scooping dirt into the mold or breaking a concrete structure, as when the mold is inverted on the ground or on a concrete pad.

While I have shown and described only a single embodiment of my invention, it is apparent that modifications may arise. Therefore, I do not wish to be limited to the disclosure set forth but only by the scope of the appended claim.

I claim:

In combination, a big-end-up ingot mold having a first pair of lugs projecting from opposite sides near the big end and a second pair of lugs projecting from opposite sides near the other end, chains engageable with said first lugs for supporting said mold in upright position and with said second lugs for supporting said mold in inverted position, and a support for assisting in turning said mold from one position to the other, said support comprising a cast metal body, and a pair of opposed upwardly extending flanges along opposite edges of said body defining a shallow trough on the upper surface of the body, said trough sloping downwardly from both ends toward the middle where the trough has a low point, said trough receiving said mold when said chains support the mold in either position with the lower edge of the mold engaging the trough near one of the upper ends of the trough, said trough guiding the mold as said chains lower it into a tilted position in which the lower edge of the mold is at said low point where said chains can engage the lugs near the other end, said trough also guiding the mold as said chains apply a lifting force to the latter lugs.

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