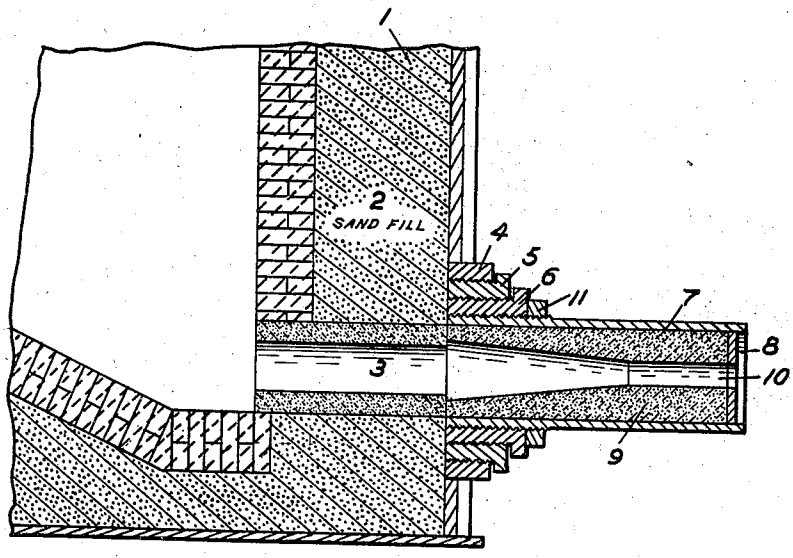
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POURING SPOUT

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Inventor

James L. Martin

By J. J. Kessenich & J. A. Church

Attorneys

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POURING SPOUT

James L. Martin, Lowell, Mass.

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2 Claims. (Cl. 22—79)

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The invention described herein may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

This invention relates to metal casting, and in particular to an improved pouring spout. While the spout of the invention has been developed in connection with centrifugal casting its utility will extend to other forms of casting as well.

In the casting operation it is essential to maintain the temperature of the molten metal while passing through the spout, otherwise the metal will chill and deposit therein and affect the important discharge characteristics. For this reason a refractory pouring spout is used. Refractory alone offers little resistance to wear and such a spout would require frequent replacement. Therefore a metal tube backing is provided for the spout. The front face covering has also been found advisable to protect the refractory from splashed metal in the mold and from mechanical shocks in general.

The improved form of spout forming the subject of the present invention incorporates these features and in addition provides an end plate which is press fitted in the protector tube, thus eliminating costly operations of welding and machining.

It is therefore an object of the present invention to provide an improved form of pouring spout for cast metal which shall be economical, easy of assembly and low in maintenance cost.

To these and other ends, the invention consists in the construction, arrangement and combination of elements described hereinafter and pointed out in the claims forming a part of this specification.

A practical embodiment of the invention is illustrated in the accompanying drawing wherein:

The single figure is a sectional elevational view of a portion of a pouring box with a pouring spout in place.

Referring to the drawing by characters of reference, there is shown a pouring box 1 with sand filling 2 and a firebrick sleeve 3 for discharging the contents. An internally threaded collar 4 is carried in an opening in the side of the pouring box and accommodates threaded bushings such as 5 and 6 which hold the sleeve of the pouring spout such as that shown at 7 in the figure but which bushings may be arranged in size and number to accommodate other sizes of spouts. The end plate 8 in the spout is press-fit and may be easily knocked out and replaced when worn. The spout proper is shown by the refractory at 9 and this is pressed in onto the end plate 8 and around a suitable mandrel to produce the throat 10 shown here as tapering in order to carry the jet a safe distance from the spout when laying down the casting. Bushings such as 5 and 6 are held in place by a locknut 11.

I claim:

1. A pouring spout for casting comprising a metal sleeve with refractory lining and a press-fitted annular end plate in the discharge end of the sleeve covering the face of the lining thereat.

2. A pouring spout for metal casting comprising a metallic sleeve with a refractory lining having a centrally disposed bore, and a press-fitted metallic end plate in the discharge end of the sleeve covering the face of the lining thereat, said end plate having an orifice aligned with the bore in the lining.

JAMES L. MARTIN.