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VENT FOR CORES

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My invention relates to improvements in vents for sand cores of molds, the primary object in view being to provide a simply constructed, efficient device for venting gases from such cores and which is adapted to function as a reinforcement for the core and for bending into substantially any shape to conform with different core contours, and for incorporation in cores at sharp bends, particularly, to vent the cores at bottle-necks therein tending to accumulate gases.

Other and subordinate objects are also comprehended by my invention, all of which, together with the precise nature of my improvements, will be readily understood when the succeeding description and claims are read with reference to the drawing accompanying and forming part of this specification.

In said drawing—
Figure 1 is a view in side elevation of my improved vent, in its preferred embodiment,
Figure 2 is a view in edge elevation,
Figure 3 is a fragmentary view in side elevation drawn to an enlarged scale and illustrating the wrapper,
Figure 4 is a view in end elevation, and
Figure 5 is a view in transverse section taken on the line 5—5 of Figure 3.

Referring to the drawing by numerals, in the preferred embodiment thereof, my improved vent comprising an elongated, tubular body 1 of flexible soft wire mesh material 2 of any suitable gauge, as regards the wire, rendering the body sufficiently strong yet readily bendable. Preferably the body 1 is flat sided, as shown at 3. A bowed brace rod 4, also of bendable material, extends from end to end of the body 1 coplaner therewith, with the ends of the rod bearing against one edge portion adjacent, the ends of the body, and an intermediate curved portion bearing against the opposite edge portion of said body. The rod 4 may be suitably secured to the body 1 to be retained therein. A wrapping 6 of any suitable material adapted to dissolve, or disintegrate, under the action of heat at a temperature of 400 to 800 degrees F., such as "Cellophane," surrounds the body 1 except the ends thereof.

The described vent is designed to be embedded in a sand core, not shown, before the latter is dried and to extend at one end out of the core for extension, in any suitable manner, out of the mold to vent the core of gases and discharge the gases into the atmosphere. When the sand, or core, is dried at high temperature, the wrapping 6 is melted, or disintegrated, and the sand of the core is baked into the mesh of the wire material so that the vent becomes an integral part of the core reinforcing the same. Should the molten metal in the mold break through the sand core, the soft wire mesh material will check the same and prevent molten metal from being blown out of the vent under the pressure of gases.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention without further explanation.

Manifestly the invention, as described, is susceptible of modification without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the appended claims.

What I claim is:
1. A vent for sand cores comprising an elongated flat-sided tubular body of soft wire mesh material open at its ends, and a longitudinally bowed brace rod within said body extending from end to end thereof and of the same diameter as the internal distance between the flat sides of said body.

2. A vent for sand cores comprising an elongated tubular body of soft wire mesh material, said body being flat sided, a wrapping of material around said body adapted to melt under the action of heat at a high temperature, and a longitudinally bowed brace rod in said body extending from end to end thereof with its ends and intermediate portion bearing against said body.