

Sept. 3, 1935.

L. MUSCAT

2,013,005

DROSS SKIMMER

Filed April 9, 1935

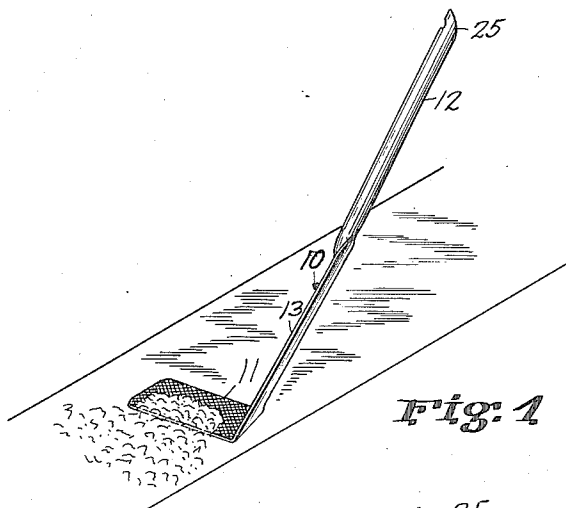


Fig: 1

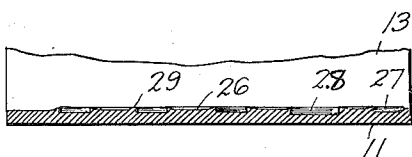


Fig: 5

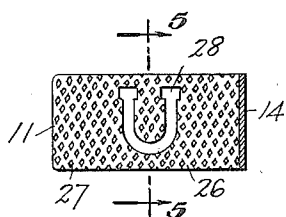


Fig: 4

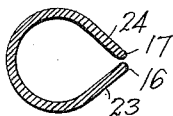


Fig: 6

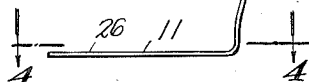


Fig: 2

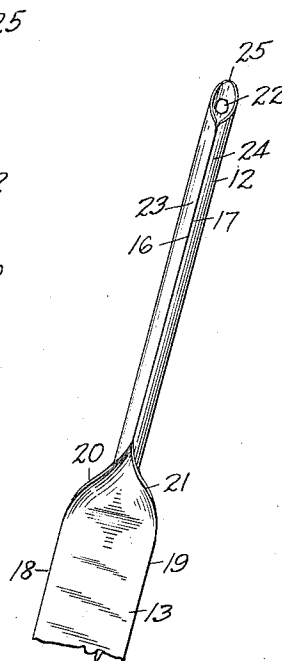


Fig: 3

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UNITED STATES PATENT OFFICE

2,013,005

DROSS SKIMMER

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a corporation of New York

Application April 9, 1935, Serial No. 15,402

6 Claims. (Cl. 266—37)

This invention relates to dross skimmers and contemplates the provision of a simple and inexpensive device, which can be efficiently manipulated by unskilled persons, for removing the dross which accumulates on the surface of molten white metals such as lead, tin and the like when such metals are poured into an open mold.

My invention further contemplates the provision of a skimmer designed to retain the dross thereon when the dross is lifted from the surface of the molten metal, and to resist slipping of the dross back into the molten metal.

My invention further contemplates the provision of a one-piece metal skimmer adapted to fit the hand of the user and to be inexpensively manufactured and provided with means for retaining the dross thereon during the skimming operation.

The various objects of my invention will be clear from the description which follows, and from the drawing, in which,

Fig. 1 is a perspective view of my improved skimmer as it appears in use during the process of skimming an open mold.

Fig. 2 is a side elevation of the skimmer.

Fig. 3 is a fragmentary rear view thereof.

Fig. 4 is a horizontal section, taken on the line 4—4 of Fig. 2 and showing, particularly, the skimming blade.

Fig. 5 is a vertical section, taken on the line 5—5 of Fig. 4.

Fig. 6 is a horizontal section of the handle.

In that practical embodiment of my invention which I have shown by way of example, the skimmer, designated generally by the numeral 10, is preferably made of a single piece of flat sheet metal. Said skimmer comprises the skimming blade portion 11, the cylindrical hollow handle 12, and the integral flat connecting portion 13 joining the blade to the handle.

It will be seen that my improved skimmer may readily be made of a single length of sheet metal of uniform width. The connecting portion 13 is bent at a preferably obtuse angle to the blade 11, being joined thereto by the integral bend 14 subtending an angle of approximately 90°, and preferably terminating in a reversely curved portion 15 to maintain the connecting portion 13 at the proper angle to the blade.

To form the handle 10, the sheet metal at one extremity of the skimmer is bent into cylindrical form to carry the respective edges 16 and 17 thereof into contact, said edges being continuous with the corresponding edges 18 and 19 of the portion 13 and being joined thereto by the curved

edges 20 and 21. A suitable perforation as 22 is made in the upper portion of the handle whereby the skimmer may be hung up on a nail or other suitable supporting means for ready access by the user. Adjacent the edges 16 and 17 and at the rear of the handle 10, the adjacent portions 23 and 24 of the handle are preferably left flat and not rounded, for ease in manufacture.

The uppermost extremity of the handle is curved as at 25 and thereby cut away to permit the skimmer to be easily hung up upon a nail or the like without obstruction by the rear portion of the handle. The handle being hollow, it permits a free circulation of air therethrough to maintain the hand of the user cool when the blade becomes heated.

It will be understood that difficulties have been experienced by those unskilled in the art, in removing dross from molten metal, in that the dross tends to slip off the blade of whatever type is used for skimming the dross. I have found that these difficulties may be obviated by roughening the upper surface 26 of the blade 11.

The roughening may be accomplished in a great variety of different ways but as illustrated, said roughening consists of a series of closely spaced indents or depressions 27 made in the surface 26 and arranged close to each other. The indents may best be made by a pointed tool or die. An additional depression as 28 may be made in such surface, said depression being illustrated in the form of an initial or letter which may constitute a trade-mark or any desired designation, the bottom of said depression 28 being smooth and said depression being arranged preferably in the center of the blade.

It will be noted that by indenting the depressions 27, the material adjacent the indent is slightly raised as illustrated at 29, so that the dross passing over the slightly raised parts 29 enters the depressions 27 and remains therein even though the skimmer be slightly tilted during the operation of lifting the dross from the surface of the molten metal.

It will be seen that I have provided a simple, inexpensive and efficient dross skimmer which tends to retain the dross on the surface of the skimming blade during the operation of removing dross from the surface of molten metal, and that I have provided a device well adapted to meet the requirements of practical use.

While I have shown and described a specific embodiment of my invention, I do not wish to be understood as limiting myself thereto but desire

to claim my invention as broadly as may be permitted by the state of the prior art and the scope of the appended claims.

I claim:

- 5 1. A dross skimmer of a single piece of sheet metal comprising a blade at one extremity of the skimmer, the upper surface of said blade being roughened and having comparatively small depressions and recessed portions thereon to retain the dross thereon during the use of the skimmer, a hollow cylindrical handle at the other end of the skimmer, and a flat portion integrally connecting the handle and the blade and arranged at an obtuse angle to the blade.
- 10 2. A dross skimmer comprising a flat blade and a cylindrical handle, the upper surface of the blade having a multiplicity of depressions and slightly raised portions thereon to resist slipping of the dross off the blade when the skimmer is used to remove dross from the surface of molten metal.

3. In a dross skimmer, a rectangular skimming blade of thin metal, the upper face of said blade being roughened to resist the slipping of dross off the blade.

4. A dross skimmer of a single piece of sheet metal including a rectangular blade having a roughened upper surface.

5. A dross skimmer of a single piece of sheet metal including a rectangular blade having a roughened upper surface, said blade being arranged at one end of the skimmer and a hollow handle bent into substantially cylindrical form to provide an air space therethrough at the other end of the skimmer.

6. In a dross skimmer, a skimming blade having a roughened upper surface including indents formed by indenting the material at closely spaced intervals with a pointed tool and providing slightly raised portions on the surface adjacent the indents.

LAZARUS MUSCAT.

CERTIFICATE OF CORRECTION.

Patent No. 2,013,005.

September 3, 1935.

LAZARUS MUSCAT.

It is hereby certified that the name of the assignee in the above numbered patent was erroneously described and specified as "American Metals Corporation" whereas said name should have been described and specified as United American Metals Corporation, as shown by the records of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 8th day of October, A. D. 1935.

Leslie Frazer
Acting Commissioner of Patents.

(Seal)