## UNITED STATES PATENT OFFICE.

JOHN FEIX, OF SAN FRANCISCO, CALIFORNIA.

## IMPROVEMENT IN CRUCIBLES.

Specification forming part of Letters Patent No. 165,811, dated July 20, 1875; application filed July 7, 1875.

To all whom it may concern:

Be it known that I, John Feix, of San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Crucibles, of which the following is a specification:

This invention relates to certain improvements in crucibles or melting-pots for melting metals, and is especially designed for the purpose of melting the precious metals, to prevent loss and waste of the same.

Such crucibles, as ordinarily constructed, cannot be packed with a sufficient quantity of the loose unmelted metal to form a sufficient charge when melted, as such metal has to be packed in the same in fragments which require much more bulk than the molten metal.

In charging the crucibles, as ordinarily practiced, it has been the custom to fill the crucible and pile the metal above the mouth of the same, in order to allow for the decrease in bulk when melted, and further to add to the metal from time to time as it sinks, until the crucible

is filled with the molten metal.

This, as is evident, proves objectionable. In the first place, in piling up the mass of metal above the mouth of the crucible, the top has to be either left off entirely or placed upon the mass of metal and allowed to sink with it as it melts until it falls upon the mouth of the crucible. This allows the coals of the fire to fall into the metal as it is melting, and also allows the metal to escape by slushing, which is a serious loss when operating with the precious metals.

The object of my invention is to overcome these difficulties and enable an ordinary crucible to be employed at its full melting capacity without danger from loss in packing pre-

vious to melting.

My invention consists in a ring or annulus of the same diameter as the mouth or top of the crucible, and with walls corresponding in thickness to the walls of said crucible, adapted to fit upon the mouth or top of the same, forming a continuation of said crucible, to hold the loose metal or bullion packed therein and prevent the ingress of coals or the loss of metal by slushing.

In the accompanying drawings, illustrating my invention, Figure 1 represents a perspective view of a crucible having the annulus or ring applied to the mouth of the same, and having a cover thereto. Fig. 2 represents a perspective view of a crucible and the ring detached therefrom.

The letter A represents a crucible of ordinary construction, and B a ring or annulus constructed of the same or similar material. adapted to fit upon the mouth of and form a continuation of the same. The bottom of the ring corresponds in shape to the mouth of the crucible, the top being preferably made circular, in order that an additional plain ring may be placed thereon, if it is desired. The walls of the ring are made of the same thickness as the walls of the crucible, so that when the two are properly placed together they will form one continuous vessel, upon which the ordinary top of the crucible may be placed, as usual.

It will be evident that, by the use of said ring or annulus in connection with the crucible, the said crucible may be charged at once with sufficient metal to fill it when melted, and that no liability of loss is incurred by slushing, and no injury from dropping coals will be incurred, as is ordinarily experienced.

It is evident that one or more of such rings may be employed, and that the crucible may be built up in this manner to any height desired, so that a full charge of metal may be melted therein.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is-

In combination with an ordinary crucible, a ring or annulus adapted to fit upon the mouth or top thereof and form a continuation of the same, substantially as and for the purposes herein described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of

the subscribing witnesses.

JOHN FEIX.

Witnesses:

SAML. HERMANN, Jos. S. Paxson.

W. H. FLETCHER.

Combined Blind and Screen for Railroad Cars.
No. 165,812. Patented July 20, 1875.

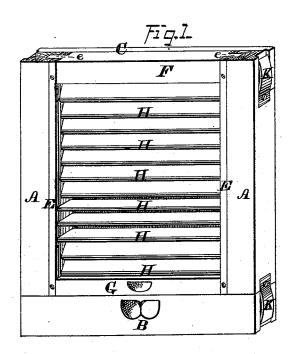


Fig. 2.

WiTNESSES= Jas & Hutchinson. John P. Young