Apr. 3, 1923. 1,450,452.

S. E. RANDALL.

SOLDERING BLOCK.

FILED MAR. 21, 1922.

Fig. 1.

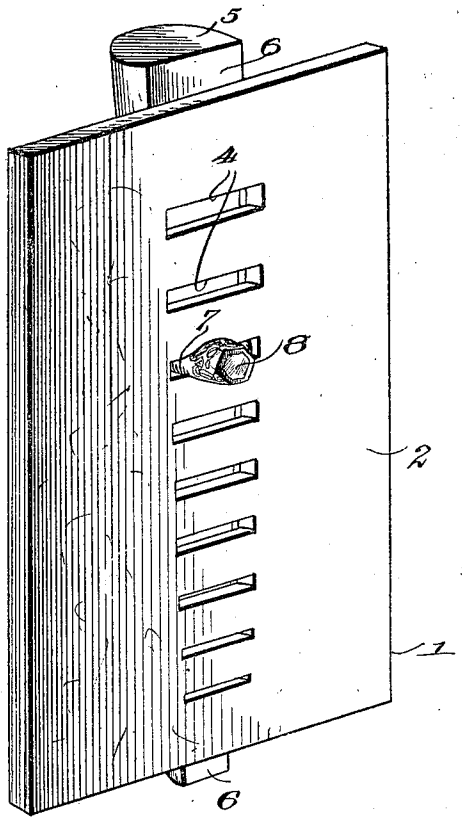


Fig. 2.

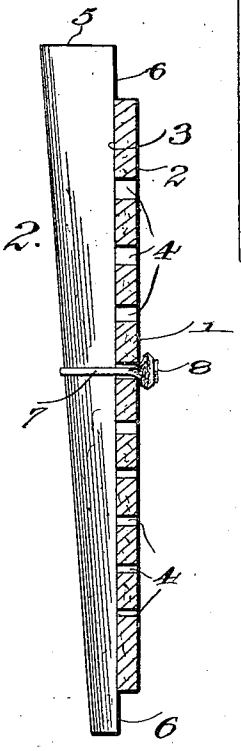
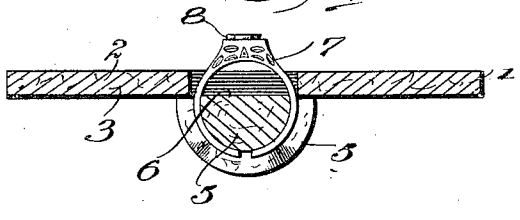


Fig. 3.



WITNESSES

Laurence A. Hanford

L. G. Bates

INVENTOR

S. E. Randall,

BY Munn & Co.

ATTORNEYS

Patented Apr. 3, 1923. 1,450,452

UNITED STATES PATENT OFFICE.

SAMUEL EDWARD RANDALL, OF JUNCTION CITY, ARKANSAS.

SOLDERING BLOCK.

Application filed March 21, 1922. Serial No. 545,623.

To all whom it may concern:

Be it known that I, SAMUEL EDWARD RANDALL, a citizen of the United States, and a resident of Junction City, in the county of Union and State of Arkansas, have invented certain new and useful Improvements in Soldering Blocks, of which the following is a specification.

My invention relates generally to soldering blocks, more particularly to a block for use in connection with the joining of the ends of a broken ring, and it consists in the combinations, constructions and arrangements herein described and claimed.

An object of my invention is to provide a simple device for holding a broken ring in position to permit of the ends thereof being joined together by welding, brazing, soldering, or the like, and without subjecting the stones set in the ring or ornamental portions of the ring to the action of the flame required for the welding, brazing or soldering operation.

A further object of my invention is to provide a device of the character described which is adapted for use with rings of various sizes.

A still further object of my invention is to provide a device having facilities for holding a ring which is to be repaired in such manner that the ends of the ring will be held in a desired relation to each other.

Other objects and advantages will be apparent from the following description, and the novel features of the invention will be particularly outlined in the appended claims.

My invention is illustrated in the accompanying drawings, forming a part of this application, in which:

Fig. 1 is a perspective view showing a practical embodiment of the invention with a ring in applied position thereon, and

Figs. 2 and 3 are respectively, a longitudinal section and a transverse section through the embodiment of the invention illustrated in Fig. 1.

In carrying out my invention, I provide a plate or block proper 1 which is illustrated in the drawings as having flat parallel upper and lower faces 2 and 3 respectively. The plate or block 1 has a series of spaced slots or elongated openings 4 formed therethrough. In the drawings, the series of openings 4 extends longitudinally of the plate or block 1 and the respective slots are arranged in parallelism. The slots or elongated openings 4 vary in width and length from one end of the series to the other end thereof, as shown.

While I have shown the plate or block 1 as having the faces 2 and 3 both flat and parallel, it is only essential to my invention that the portion of the plate containing the slots 4 be formed with the lower face thereof substantially flat.

A tapering retaining member 5 has a side 6 adapted to lie flatwise against the portion of the side or face 3 through which the slots 4 open, and another side adapted to conform to the contour of a segmental portion of a ring. In other words, the tapering retaining member 5 is substantially semicircular in cross sectional contour at any point along its length and tapers or decreases in diameter uniformly from one end thereof to the other.

The plate or block 1 and the retaining member 5 are preferably made of an asbestos treated or impregnated material or other material which is a poor conductor of heat and practically flame-proof.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. The device is suitable for use in holding rings of a great many different sizes so that the ends of a broken ring may be joined together by soldering, welding or the like. In effecting the repair of a broken ring, such as that indicated at 7, the ring is projected from the side 2 through the appropriate slot or elongated opening 4 so that the ends protrude from the slot 4 beyond the plane of the face 3. The smaller end of the tapering member 5 is then inserted between the projecting portion of the ring and the face 3, the flat side 6 of the retaining member being arranged flat against the face 3. The retaining member 5 is then moved slidably along the face 3 until the setting or enlarged portion of the ring, such as indicated at 8, has been moved against the face 2 of the plate or block 1 or the upper edges of the slot 4 in which disposed, at which time the ring 7 will be held against movement relatively to the block 1 until the retaining member 5 is withdrawn. It is to be observed at this point that the retaining member 5 may be adjusted in respect to the face 3 of the block and the portion

of the ring 7 projecting therebeyond to spread the ends of the ring to a desired extent. The work of enlarging a broken ring at the time the ends thereof are joined together is thus facilitated.

The retaining member 5 and the plate or block member 1 act conjointly as a shield to protect stones set in the ring or an ornamental portion of the ring from the action of a flame such as is used in soldering or welding operations in connection with the repair of the ring. As stated, the plate 1 and the retaining member 5 are preferably formed of asbestos or a material having like properties. It will be manifest that I have provided a device of simplified construction which is thoroughly effective for the purpose intended and is adapted for use in effecting the repair of a ring of any ordinary size.

Obviously, my invention is susceptible of embodiment in forms other than that in which illustrated in the accompanying drawings, and I therefore consider as my own, all modifications and adaptations of the form of the device disclosed herein which fairly fall within the scope of the appended claims.

I claim:—

1. A device of the character described comprising a block having a flat face and being formed with a slot opening through the flat face thereof, said block being made of an incombustible material, and a retaining member made of an incombustible material and being adapted to be inserted between the flat face of the block and the inner wall of a portion of a ring projected through the slot and extending beyond the plane of the flat face of the block, whereby the ring may be held in a desired position in respect to the block.

2. A device of the character described comprising a block made of an incombustible material and having a flat face, said block having a slot formed therethrough to open through the flat face thereof, said slot being adapted to have a portion of a ring projected therethrough to extend beyond the plane of the flat face, and a tapering retaining member formed of an incombustible material and being adapted to be inserted between the flat face of the block and the inner wall of the projecting portion of the ring.

3. A device of the character described comprising a block having slots formed therethrough, said block being made of an incombustible material and said slot being adapted to have the end portions of a broken ring projected therethrough, and an elongated tapering retaining member made of an incombustible material and adapted to be wedged between the end portions of the ring and the proximate face of the block to hold the ring in a desired position in respect to the block and the ends of the ring in desired relation to each other.

4. A device of the character described comprising a block having a flat face and being formed with a slot opening through the flat face thereof, said slot being adapted to have the end portions of a split ring projected therethrough, and a tapering elongated member adapted to be wedged between the flat face of the block and the end portions of the ring, said retaining member being substantially semi-circular in cross sectional contour and having a flat side adapted to slide flatwise on the flat face of the block.

5. A device of the character described comprising a flat block having a series of spaced slots formed therethrough, and a longitudinal retaining member having a flat side adapted to lie flatwise against the block and to be moved axially transversely of the respective slots, as and for the purpose described.

6. A device of the character described comprising a flat block made of an incombustible material and having a series of spaced slots formed therethrough, said slots varying in width and length from one end of the series to the other end thereof, and a tapering member of substantially semi-circular cross sectional contour and being made of an incombustible material, said retaining member being adapted to be slidably moved upon one face of the block in a desired position in respect to said slots to engage portions of rings projected through said slots selectively, whereby said rings are releasably held in desired positions in respect to said block.

SAMUEL EDWARD RANDALL.