April 21, 1925. 1,534,159

E. A. CHASE

SLING FOR HANDLING STONE

Filed Aug. 29, 1924

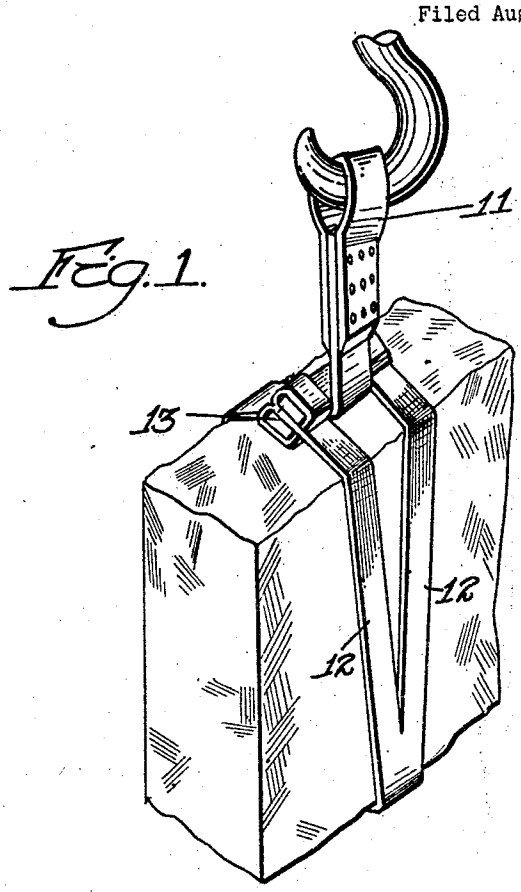



Fig. 1.

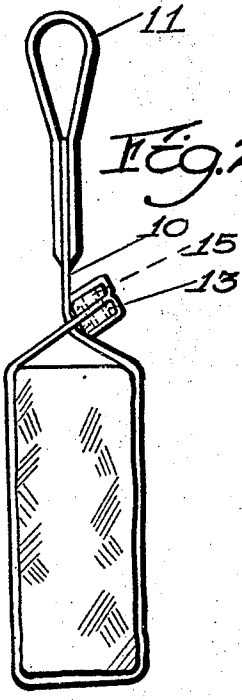



Fig. 2.

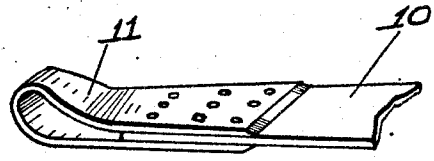
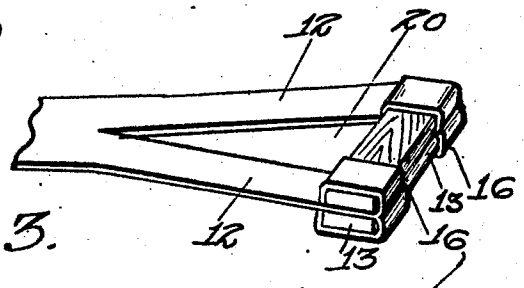



Fig. 3.



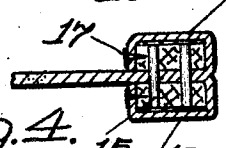




Fig. 4.

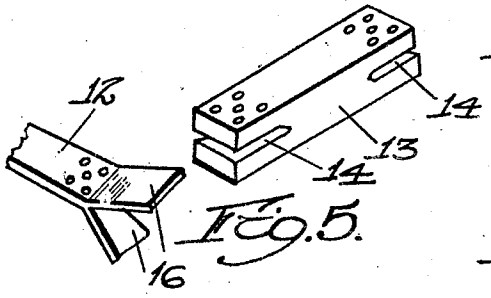



Fig. 5.

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# UNITED STATES PATENT OFFICE.

ELROY ALBERT CHASE, OF NORTHFIELD, VERMONT.

## SLING FOR HANDLING STONE.

Application filed August 29, 1924. Serial No. 734,961.

*To all whom it may concern:*

Be it known that I, ELROY A. CHASE, a citizen of the United States, residing at Northfield, in the county of Washington and State of Vermont, have invented a new and useful Sling for Handling Stone, of which the following is a specification.

This invention relates to a sling to be used in place of the ordinary rope sling now employed for handling and turning stone in a stone working plant or the like. The principal objects of the invention are to provide a carrying device for this purpose which will not present a small hard surface to the edges or corners of the stone that would be likely to chip these edges; to entirely eliminate the use of blocks or "softening" placed under the rope to prevent slipping and thus save considerable time in finding and placing them in position; to provide a sling which will hug the stone and not slip on it thus reducing the wear of the sling and which will be nonabsorptive, thus avoiding the difficulties of handling water-soaked rope; to provide a sling from which the stain that accumulates in handling the stone can be washed very easily; and to provide a device which will be safer for the people doing the work, presenting less danger of pinching of the fingers and one which will be more durable than those now being employed.

Other objects and advantages of the invention will be described hereinafter.

Reference is to be had to the accompanying drawings in which

Fig. 1 is a perspective view of a large piece of stone supported by a sling constructed in accordance with this invention;

Fig. 2 is an end view of the same;

Fig. 3 is a perspective view of the sling itself in a flat condition showing the two ends only;

Fig. 4 is a sectional view through the end of the wood bar; and

Fig. 5 is a perspective view of the wood bar with the belt ready to be put in position thus showing the method of construction.

Large stones are handled in the stone working plants by means of supporting slings made of rope. These are open to several objections. In the first place the hard twisted rope presents only a small surface to the stone for gripping and holding it. Necessarily where it passes around the corners or edges the pressure due to the weight of the stone is all concentrated at a few points. This would result in the chipping of the edges and the injuring of the stone if the bare rope were used and in practice it necessitates the placing of blocks or softening under the rope to prevent this injury. These blocks have to be placed individually by hand and also, under actual operating conditions, the people round-about have to waste considerable time in finding them when they are needed. The rope also gets water-soaked around the polishing bins which makes it hard to handle. It is practically impossible to clean stain from it and the grit which collects upon it. The rope on account of its circular shape in cross section is apt to pinch the fingers of the operators and causes some accidents in that way. As stated above the principal objects of the invention are to avoid these difficulties.

In its preferred form the sling is made of a long piece 10 of rubber belting of a considerable width. I prefer to use rubber belting which comprises canvas or other textile material coated and saturated with rubber. This material is not stretchable but its entire surface is covered with rubber. It is not absorbent and its surface can be cleaned readily. This is fastened at one end to a leather loop 11 by riveting it or otherwise permanently securing it thereto. The other end of the rubber belt is slit longitudinally and centrally quite a distance from the end to form two diverging ends 12. These are connected to a wood bar 13. This bar is provided with two longitudinal slits 14 at opposite ends. Each of the belt ends 12 is inserted in one of these slits so as to extend through the wood bar and then rivets 15 are inserted through the ends of the wood bar to secure the two ends together over and around the belt. This belt is then split through the center parallel with its flat surfaces to form two tip ends 16 which are bent back over the ends of the wood bar and over the rivet heads and clear over to the back side where they are tacked at 17 to the edge of the wood bar. This completes the construction as shown in Fig. 3 leaving a space 20 between the two belt ends.

In the use of the device, the wood bar is placed on the top of the stone to be handled and the two ends 12 of the belt dropped down from the top around and under it so that the loop end 11 can be brought up over the back of the stone to the top and under the wood bar 13 through the space 20 as

shown in Figs. 1 and 2. This leather loop is supported and carried by the usual hook.

The manufacture of the slings has been described and its use is thought to be clearly obvious from the description and drawings. It will be readily understood also that with the use of a sling of this character there is no danger of injuring the edges of the blocks by the pressure due to its weight as there is a wide surface of contact at each corner of the sling passing over the edge. This entirely eliminates the use of blocks which have been put around the edges of the stone heretofore to prevent their being broken. This sling is durable and easily cleaned. The grit that accumulates on it and the stain that it may receive are taken off very easily so that the stone will not be marred or discolored by it. The stone can be handled around the plant in almost any way and is safe from injury by its contact with the sling or any part of it. Its use also tends to reduce accidents because there is practically no chance of any person around the plant getting his finger pinched in this close fitting arrangement on account of its wide contact and close fitting qualities.

It will be understood that although I have described the belt as being of rubber and I preferably use a rubber belting, I can use a leather strip, preferably a piece of leather belting made of the same design.

Although I have illustrated and described only a single form of the invention and mentioned only two materials for the main part of the sling, I am aware of the fact that other modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore I do not wish to be limited to all the details of construction herein shown, but what I do claim is:

1. As an article of manufacture, a sling for use in handling and turning stone comprising a wide belt of material with a soft surface having a loop end and adapted to be placed around the stone, said belt being slit longitudinally at the other end to provide two integral diverging ends, and a bar arranged crosswise and fixed to said ends, the ends being separated enough to permit the loop end of the sling to pass under the bar through the space between them for the purpose described.

2. As an article of manufacture, a sling for handling and turning stone comprising a piece of rubber belting, a loop attached to one end for supporting the sling, said belting being slit longitudinally and centrally for a distance in from its opposite end and the two ends thus produced being separated from each other, and a bar located transversely at the end of the sling and provided with slits therethrough at its opposite ends through which the two separated ends of the belting are placed and secured leaving a space between the two rubber belt ends through which the loops end can be passed under the bar.

3. As an article of manufacture, a sling for handling and turning stone comprising a piece of rubber belting, a loop attached to one end for supporting the sling, said belting being slit longitudinally and centrally for a distance in from its opposite end and the two ends thus produced being separated from each other, a wooden bar located transversely at the end of the sling and provided with central slits therethrough at its opposite ends through which the two separated ends of the belting are placed and riveted to provide for securely attaching them thereto, the two ends of the rubber belting passing through the wood bar being split centrally in a plane parallel to their flat surfaces to provide two tips and these tips being bent around over the ends of the wood bar and secured to the opposite or rear edges thereof to cover the rivet heads.

4. As an article of manufacture, a sling for handling and turning stone comprising a piece of rubber belting, a loop attached to one end for supporting the sling, a wooden bar located transversely at the end of the sling and provided with a slit therethrough at its end through which the end of the belting is placed and riveted to provide for securely attaching it thereto, the end of the rubber belting passing through the wood bar being split centrally in a plane parallel to its flat surfaces to provide two tips and these tips being bent around over the end of the wood bar and secured to the opposite or rear edge thereof to cover the rivet heads.

5. As an article of manufacture, a sling for handling stone comprising a wide flat belt located in direct contact with the stone all around it and all the way across the belt, and having a non-absorptive surface that can be cleaned readily and consisting of a single integral piece having two branches at one end separated from each other.

In testimony whereof I have hereunto affixed my signature,

ELROY ALBERT CHASE.