June 10, 1924.

R. S. JONES

1,496,885

SEAL

Filed July 20, 1921

Fig. 1.

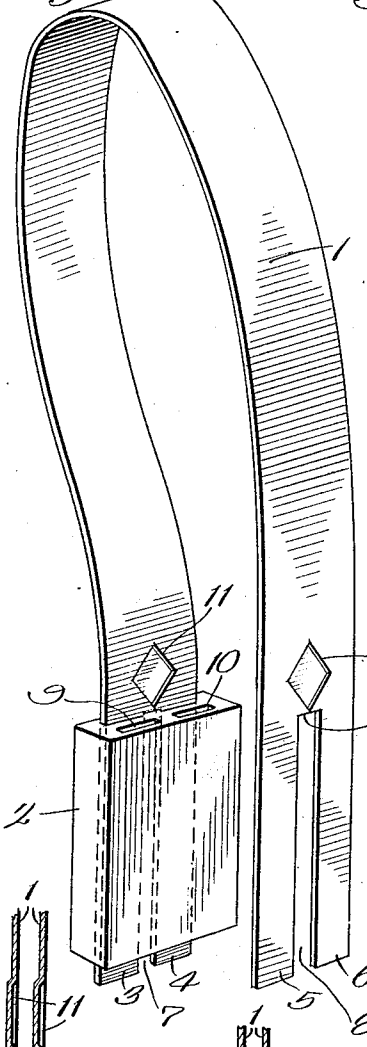


Fig. 2.

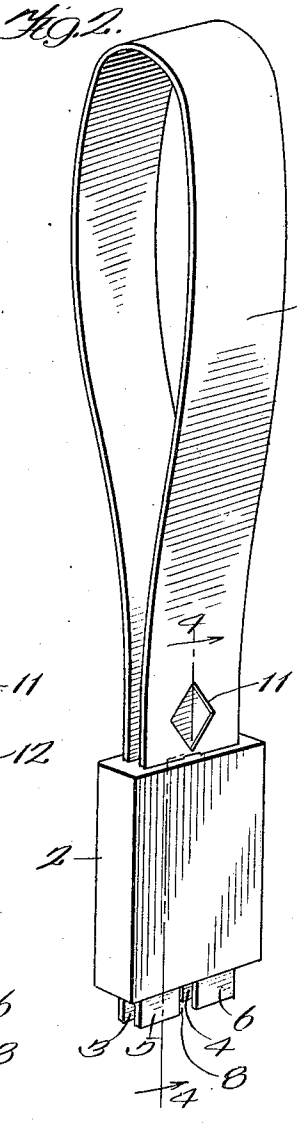
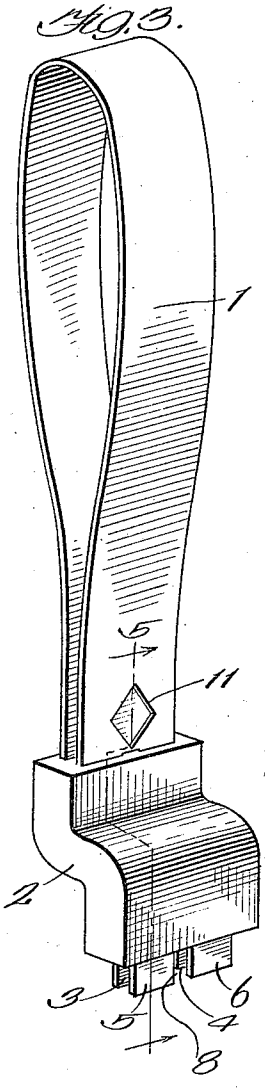


Fig. 3.



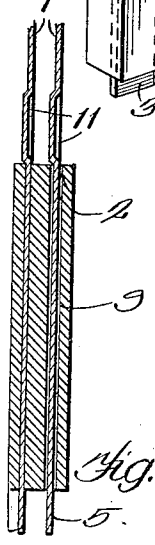


Fig. 4.

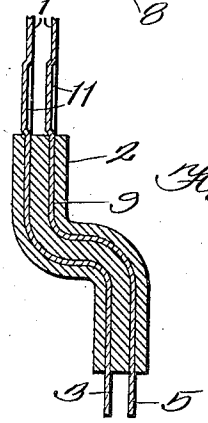


Fig. 5.

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UNITED STATES PATENT OFFICE.

RUSSELL S. JONES, OF CHICAGO, ILLINOIS.

SEAL.

Application filed July 20, 1921. Serial No. 486,095.

To all whom it may concern:

Be it known that I, RUSSELL S. JONES, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Seals, of which the following is a full, clear, concise, and exact description.

My invention relates to seals that employ loops and sealing blocks for tightly assembling the ends of the loops in a manner to prevent undetectable breakage or mutilation of the loops or the sealing blocks.

In practicing one feature of my invention, at least one end and preferably each end of the loop member of a seal is forked and the sealing block is formed with passages through which the fork sides pass, the material of the sealing block extending into the spaces between the ends of the loop member and the fork sides thereof. This construction enables me to employ loop members in the form of broad ribbons, the sealing blocks being capable of assembly with ends of the loop members without being weakened by the ribbon receiving passages in the sealing block, the width of these passages being reduced to correspond with the width of the fork sides instead of corresponding to the whole width of the ribbon member.

The invention also provides means to guard against undetectable severance of the loop at the block, and in carrying out this feature of my invention I bulge or otherwise mark both sides of the loop member between their longitudinal edges and near the inner end of and upon the exterior of the sealing block. If the loop is severed adjacent the block and retucked into the block, such mark will become at least partially concealed by the block to furnish evidence of tampering.

I will explain my invention more fully by reference to the accompanying drawing in which Fig. 1 is a perspective view showing a sealing block which is preferably in permanent assembly with one end of the sealing loop, the other end of the sealing loop being shown, in this figure, in unassembled relation with the block; Fig. 2 is a view similar to Fig. 1 excepting that the end of the loop that is not assembled with the block as illustrated in Fig. 1 is so assembled as illustrated in Fig. 2; Fig. 3 illustrates the sealing block and the forked ends of the loop clamped to prevent the separation of the loop and block; Fig. 4 is a sectional view on line 4—4 of Fig. 2; and Fig. 5 is a sectional view on line 5—5 of Fig. 3.

Like parts are indicated by similar characters of reference throughout the different figures.

The sealing loop 1 is preferably a thin ribbon of metal. The sealing block 2 is preferably formed of lead. Both ends of the loop member are preferably forked, the sides 3 and 4 of one forked end and the sides 5 and 6 of the other forked end being preferably straight and spaced considerable distances apart by the fork gaps 7 and 8. The sealing block 2 is preferably cast about the fork sides 3 and 4 and is formed with longitudinal passages 9 and 10 to receive the sides 5 and 6 of the other forked end of the loop member. The material of the sealing block extends into the spaces between the ends of the loop member and between the sides of each of the forked ends of the loop member. If the passages were as wide as the ribbon the block could be more easily spread apart to enable a tamperer to cut the ribbon within the area of the block and thereafter collapse the block to guard against detection of mutilation. By forking the ends of the ribbon and providing a separate passage for each fork side the width of each passage is so far reduced that the block cannot be so readily spread apart thereat.

I prefer, however, to provide means for preventing the undetectable severance of the ribbon at the block. In practicing this feature of my invention the sides of the loop member are marked between their longitudinal edges and near the inner end of and upon the exterior of the sealing block. This marking is preferably in the form of bulges 11 which terminate at the shoulders 12. If either side of the loop is severed at the base of its forked end and is retucked into the block the adjacent marking 11 will also enter the block to be at least partially concealed, thereby affording evidence of the tampering.

After the free end of the loop has been tucked into the block as illustrated in Figs. 2 and 4 the block and the ends of the loop therein are crimped, as illustrated in Figs. 3 and 5, to guard against the withdrawal of either loop end of the block.

It will be observed that both ends of the loop member project beyond the block when

the seal has been applied, the extent to which these ends project being defined by the abutting engagement of the loop ends with the block. It is preferable to have both ends of the loop project through the block to the same extent but the invention is not to be thus limited. By having the loop ends project beyond the block predetermined distances defined by the abutting engagement of the loop ends with the block the inspector of the seal may determine whether or not the seal has been properly applied, for if the loop ends do not project their predetermined distances the inspector will know that the seal has either not been properly applied or has been tampered with.

While I have herein shown and particularly described the preferred embodiment of my invention I do not wish to be limited to the precise details of construction shown as changes may readily be made without departing from the spirit of my invention, but having thus described my invention I claim as new and desire to secure by Letters Patent the following:—

1. In a seal, the combination with a loop member which is forked at each end; of a sealing block carried upon one forked end of the loop member and formed with two passages through which the two sides of the other forked end pass, the material of the sealing block extending into the spaces between the ends of the loop member and between the sides of each of said forked ends.

2. In a seal, the combination with a loop member which has a forked end; of a sealing block formed with two passages through which the two sides of said forked end pass, the material of the sealing block extending into the spaces between the ends of the loop member and between the sides of said forked end.

3. In a seal, the combination with a loop member which is forked at each end; of a sealing block carried upon one forked end of the loop member and formed with two passages through which the two sides of the other forked end pass, the material of the sealing block extending into the spaces between the ends of the loop member and between the sides of each of said forked ends, said loop member being marked near and below the base of each forked end.

4. In a seal, the combination with a loop member which has a forked end; of a sealing block formed with two passages through which the two sides of said forked end pass, the material of the sealing block extending into the spaces between the ends of the loop member and between the sides of said forked end, said loop member being marked near and below the base of said forked end.

5. In a seal, the combination with a loop member; of a sealing block surrounding both ends of the loop member which have shoulders that abut the inner end of the block and both of whose sides are marked between their longitudinal edges and near the inner end of and upon the exterior of said block.

6. In a seal, the combination with a loop member; of a sealing block fixedly carried upon one end of the loop that projects through and beyond the block, the other end of the loop member having abutting engagement with the block and also projecting through and beyond the block.

In witness whereof, I hereunto subscribe my name this 14th day of July, A. D. 1921.

RUSSELL S. JONES.