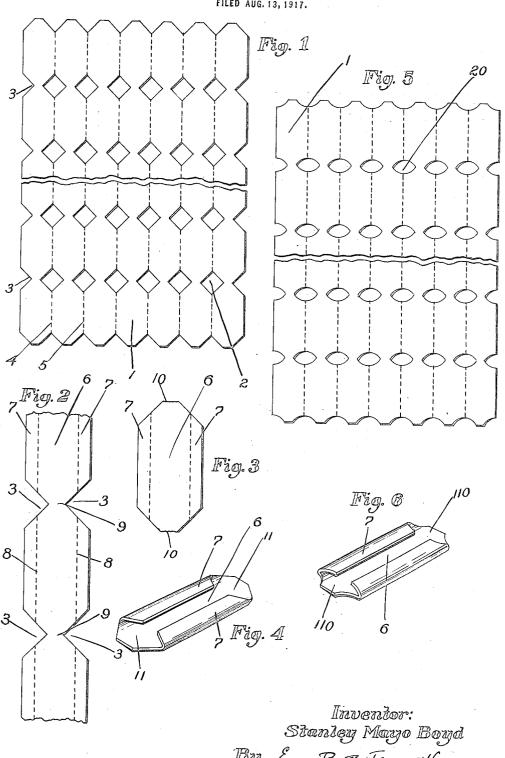
S. M. BOYD. SEAL AND METHOD OF MAKING THE SAME. FILED AUG. 13, 1917.



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UNITED STATES PATENT

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SEAL AND METHOD OF MAKING THE SAME.

Application filed August 13, 1917. Serial No. 185,818.

 $To\ all\ whom\ it\ may\ concern:$

Be it known that I, STANLEY MAYO BOYD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Seals and Methods of Making the Same, of which the following is a specification.

This invention relates to seals for metallic strapping and the like, and a method of making the same. It is an object of the invention to provide a seal having novel and advantageous characteristics as well as an extremely simple method whereby a large quantity of such seals can be efficiently and 15 economically manufactured. Seals of the character described comprise generally a slotted tubular seal into which overlapped ends of tensional box strapping are slidably inserted, the sleeve and overlapped ends be-20 ing thereafter simultaneously crimped to-gether to provide a tension resisting joint. These seals as heretofore made, in so far as I am aware, have been made by feeding long strips of material, the width of the strip be-ing the length of the seal, into a machine which cuts off a blank from the strip and folds this blank into the seal. Another operation consists in feeding individual blanks into a machine which folds these blanks by passing them through mandrels, dies or the like.

In contradistinction with these methods of manufacture, I propose to stamp out portions from a large sheet of material, the 35 stamped out portions roughly defining the seal blanks; thereafter to cut the sheet preferably along the line of the major spaces between the cut out portions into longitudinal strips comprising a plurality of seal blanks 40 united by narrow portions of the sheet metal, and thereafter to fold the blanks, preferably by passing them through mandrels or the like. In carrying out this method, the blanks may be broken or cut apart across the as narrow portions above referred to, either before or after they are folded. By this method a large number of sheets can be stamped by a single die and the entire process of manufacture is tremendously simpli-**50** fied.

In the drawings;

metal stamped out according to the first step of my proposal;

Fig. 2 is an enlarged view of a fragment 55 of one of the strips resulting from cutting the stamped sheet;

Fig. 3 is a plan view of an individual

blank;

Fig. 4 is a perspective view of a completed 60 seal;

Figs. 5 and 6 are, a plan view of a sheet comprising a modified form of the invention, and a perspective view of the resulting seal, respectively.

In the drawings, 1 represents a sheet of thin metal suitable for forming seals, which has been subjected to the action of a die, preferably simultaneously with other sheets in a stack so as to cut out therefrom a series 70 of dimond shaped apertures 2 in the body thereof and notches 3 in the edges thereof, corresponding of course to one-half of the apertures 2. These strips comprise body portions 6 of the seal including what will 75 be the wings 7 when the same is subsequently folded along the dotted lines 8, and having notches 3 in either side thereof. It will be noted that the strip so formed comprises a plurality of seal blanks, each connected by a 80 narrow web 9 which may be readily cut or broken to separate the individual blanks.

In Fig. 3 is shown an individual blank which is formed by breaking up the strips shown in Fig. 2, as indicated at 10, and in 85 Fig. 4 is shown a completed seal comprising the back portion 6 and the wings 7. It will be noted that the back portion 6 of the seal extends considerably beyond the wings 7 at both ends of the seal, providing on the inner 90 side extending lips 11, which are useful in guiding in the ends of the metal strap, and upon the outer side an increased space for advertising material or the like, as well as providing a more ornamental contour to the 95 seal. The increased advertising space and the ornamental contour of the exposed surface of the seal are desirable inasmuch as these seals are usually made in conspicuous

colors and applied to plain black strapping, 100 Figs. 5 and 6 will be readily understood from the preceding description, most of the reference characters being the same. Fig. 1 is an elevation of a sheet of thin this case, the apertures 20, which correspond

as to provide configurations at the edges of the lip 110 shown in Fig. 6.

Having now described my invention, I

1. A seal comprising a slotted flat tubular sheet metal structure having a comparatively narrow lip projecting from at least one end thereof, and serving to connect said 10 tubular seal with a similar tubular seal by a single thickness of metal, exposed to be

severed from either side thereof.

2. The method of making seals for tensional metallic strapping or the like com-15 prising stamping out from a sheet of sheet name to this specification. material a plurality of apertures, separating

to the apertures 2 in Fig. 1, are elliptical so the sheet material along the lines defined by the apertures, to produce a series of connected flat seal blanks, folding in portions of said flat seal blanks, and separating said 20

strips into individual sealing units.

3. A seal for securing the ends of metal strapping comprising a back member having wings at both edges thereof, said wings being folded back over said back member in 25 spaced relation thereto, said back member having an extension at one end forming a guide for guiding one end of a strap between said back member and said wings.

In testimony whereof, I have signed my 30

STANLEY MAYO BOYD.