

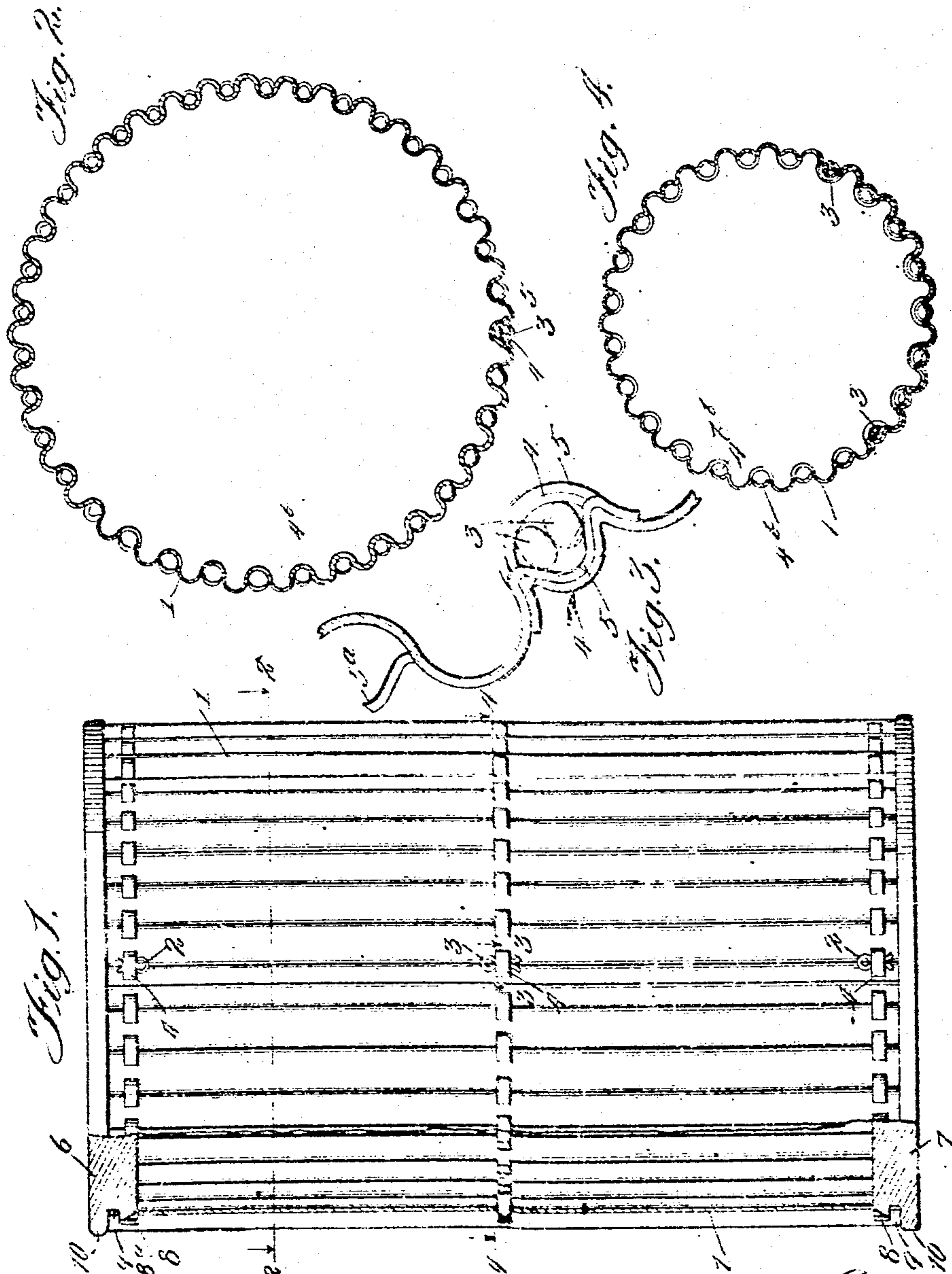
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BARREL OR RECEPTACLE.

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898,484.

Patented Sept. 15, 1908.



Witnesses:  
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*Fig. 5.*  
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# UNITED STATES PATENT OFFICE.

JOHN H. KILLION, OF CHICAGO, ILLINOIS.

## BARREL OR RECEPTACLE.

No. 898,484.

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed January 9, 1907, Serial No. 351,436. Renewed February 13, 1908. Serial No. 415,779.

*To all whom it may concern:*

Be it known that I, JOHN H. KILLION, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Barrels or Receptacles, of which the following is a full, clear, and exact specification.

This invention relates to barrels, boxes or other like receptacles for packing, storing and shipping purposes and it has for its primary object to provide an improved article of this character which shall be of knocked-down construction and which will be light and durable when in condition for use, and capable of having its component parts laid in a substantially flat condition when knocked down so that these parts may be packed together with a plurality of the elements of other like barrels or receptacles when being shipped or stored empty.

A further object of the invention is to provide an article of this character having a body portion which shall be capable of being overlapped a greater or less extent around itself, whereby the capacity of the same may be reduced and thus provide means whereby the shipper, when desiring to return or ship but a fraction of a barrel of goods, may pack the same in a secure condition without the necessity of employing extra packing for holding the goods in place.

With a view to the attainment of these ends and the accomplishment of certain other objects, which will hereinafter appear, the invention consists in the features of novelty which will now be described with reference to the accompanying drawings and more particularly pointed out in the claims.

In the said drawing Figure 1 is a side elevation, partly in vertical section, of a barrel or receptacle embodying this invention. Fig. 2 is a transverse section thereof taken on the line 2—2 of Fig. 1. Fig. 3 is an enlarged detail section on the line 3—3 of Fig. 1. Fig. 4 is a view similar to Fig. 2, showing the ends of the body element of the barrel, overlapped a considerable extent for reducing the capacity, and Fig. 5 is a detail vertical sectional view of a modification hereinafter described.

The body of the barrel is composed of a strip 1 of sheet metal or other suitable material, which is preferably corrugated longitudinally of the barrel and has its free ends overlapped with the corrugations of one end

inter-meshing with those of the other, as shown in detail in Fig. 3. When the ends are thus overlapped, they may be secured together by any suitable means, but preferably by removable cotters or pins 2, 3, which pass through inter-meshing loops 4, 5, struck up from the extremities of the strip 1, the loop 4 on one extremity being forced through a corresponding aperture in the other extremity and inter-meshing with the loop 5 on the latter extremity.

6, 7 are the heads of the barrel, which, in this example of the invention, are illustrated as consisting of disk-like members composed of wood or any other suitable material and approximating in outline the exterior formation of the barrel in cross-section which, in this example, is circular. The edges of these heads are formed with flanges 8 and grooves 9 and the upper and lower edges of the strip 1 directly opposite the flanges 8 are formed with grooves for receiving said flanges. These latter said grooves are produced by repeating the loops 4 entirely around the barrel in every alternate corrugation, as shown at 4<sup>a</sup>, the inward bends only, however, being thus looped. Consequently it will be seen that wherever the corrugations turn inwardly they are virtually grooves and in this groove the flange 8 engages and is securely held by the uncut portions of the inward corrugations against both inward and outward movement, while the uncut portion of the inward corrugation at the outer side of this loop or cut portion engages in the groove 9, as clearly shown in Fig. 1. With a barrel thus constructed, it will be seen that when the flanges 8 are placed within the grooved edges of the body element 1, and the cotters 2, 3 inserted through the loops 4, 5, at the point where the body strip becomes tight and secure, a complete closure is produced and the heads will securely hold the body element from crushing transversely, while the corrugations of such body element will be effectual in preventing the article from crushing in a longitudinal direction; the extreme edges of the body element being protected when the barrel stands on end by peripheral flanges 10 on the heads, which project over and cover the corrugations, as shown in Fig. 1, and also form circular members upon which the barrel may be rolled on a flat surface without injuring the corrugations.

To knock down the barrel, it is only necessary to withdraw the cotters when the body



element or strip 1 will straighten out in a flat form and may be inter-meshed or stacked with a plurality of such elements in a very compact condition for shipment, the heads 5 being similarly stacked one upon the other.

To reduce the capacity of the barrel when it is desired to use the same for a fraction of a barrel of goods and it is important that the goods be tightly packed therein, the desired result may be accomplished by extending the overlap of the two extremities of the body element or strip 1, as shown in Fig. 4, and employing heads 6, 7 of similar diameter, which will be inserted in the ends of the body element as before described. When the overlap is thus extended the cotter pins 2 at the outer edges of the body strip are, of course, inserted through the pair of inter-locked loops 4<sup>a</sup>, 5<sup>a</sup>, which come into register at the edge of the outer extremity of the strip 1. For that reason the strip 1 is provided with a line of these loops similar to the loops 4, 4<sup>a</sup>, 5<sup>a</sup>, extending longitudinally of the strip and directly in line with that pair of such loops through which the cotter pin 3 is inserted, as shown at 4<sup>b</sup>. This line of said loops, if desired, may be extended entirely around the barrel, as shown in Fig. 2, and the groove thus produced may be utilized for holding an intermediate head or partition consisting of a flat board 11, or they may be extended only so far as is necessary for the attachment of the ends of the strip 1 by means of the cotter pin 3 when reducing the capacity of the barrel.

In order that the heads 6, 7, and the intermediate partition 11 may be inserted in the ends of the barrel after the ends of the body strip have been secured together at one end and the middle, the inner sides of the flanges 8 are beveled, as shown at 8<sup>a</sup> on the heads 6, 7, and at 11<sup>a</sup> on the partition 11, the inwardly projecting uncut portions of the corrugations occurring immediately to the outward of the loops 4, 5, being sufficiently flexible, especially before the cotter 2 at that end of the barrel is inserted, to permit the head to be thus forced into place.

In order that the invention might be fully understood by those skilled in the art, the details of the foregoing embodiment thereof have been thus specifically described but

What I claim as new therein and desire to secure by Letters Patent is—

1. In an article of the character described, the combination of a body element composed of a continuous strip of sheet flexible material, corrugated transversely of the strip and longitudinally of the body element, the ends of the corrugated strip being adapted to be overlapped to intermesh the adjacent corrugations, means for detachably securing the ends together, and a head removably secured within the end of the body element.

2. In an article of the character described,

the combination of a body element composed of a continuous flexible strip of sheet material having corrugations extending lengthwise of the body element, the ends being adapted to be overlapped to intermesh the adjacent corrugations, means for detachably securing the ends together to constitute a continuous wall of the receptacle, and grooves formed in the edges of said strip, and heads having their edges inserted in said grooves and detachably held thereby.

3. In an article of the character described, the combination of a body element consisting of a strip of flexible material having loops struck up in lines along the edges of the strip to form supporting means for the heads, and the heads detachably held in place at the ends of the body element by said supporting means.

4. In an article of the character described, the combination of a body element composed of a flexible strip, having corrugations extending transversely thereof and provided with loops formed in lines extending transversely of the corrugations, means whereby the extremities of said strip may be locked together when the said loops on one extremity are inter-meshed with the loops of the other extremity, and one or more heads detachably secured in the body element.

5. In an article of the character described, the combination of a body element consisting of a flexible strip having loops struck up therefrom in lines along the edges thereof to form grooves, and a head engaging the edge of the body element and having a flange fitting within the body element and engaging in and detachably supported by said groove.

6. In an article of the character described, the combination of a body element composed of a strip of flexible material having corrugations extending lengthwise of the body element and loops struck out from the inward corrugations in lines extending cross-wise of the corrugations and contiguous to the edges of the strip, means for detachably securing the ends of the strip together, and heads fitted in the body element and engaging in the grooves produced by the formation of said loops.

7. In an article of the character described, the combination of a body element composed of a strip of flexible material having corrugations extending lengthwise of the body element and loops struck out from the inward corrugations and contiguous to the edges of the strip, means for detachably securing the ends of the strip together and heads fitted to the body element and engaging in the grooves produced by the formation of said loops, a portion of the heads projecting over the edges of the body element.

8. In an article of the class described, the combination of a flexible member, the ends of which are adapted to be overlapped,



means for detachably securing the ends together to constitute a body portion, means whereby the diameter of the body may be varied, and heads detachably engaging the  
5 ends of the body.

9. In an article of the class described, the combination of a flexible member, the ends of which are adapted to be overlapped, means for detachably securing the ends together to constitute a body portion, means  
10 whereby the diameter of the body may be varied, and heads detachably engaging the

ends of the body, a portion of the heads projecting over and engaging the edges of the body to protect said edges.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 4th day of January A. D. 1907.

JOHN H. KILLION.

Witnesses:

J. H. JOCHUM, Jr.,

C. H. SEEM.