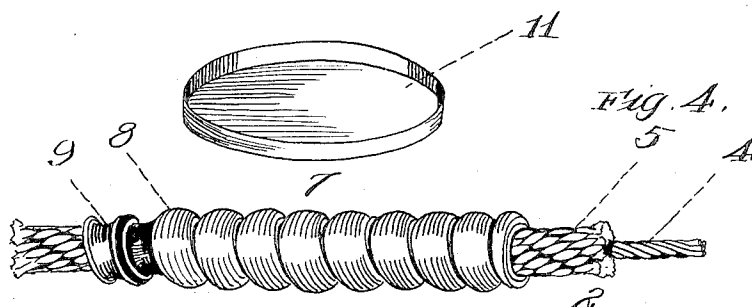
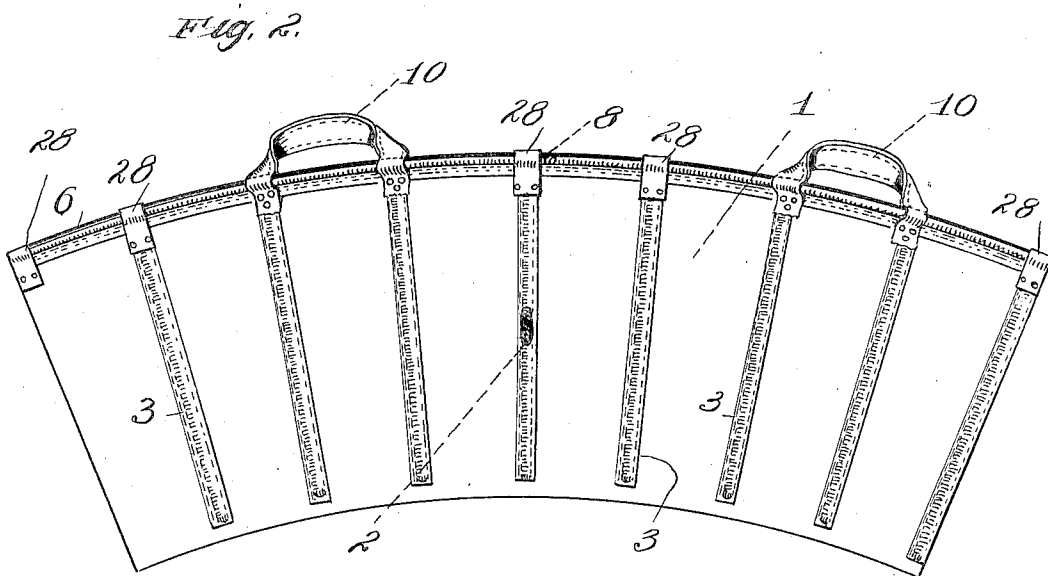
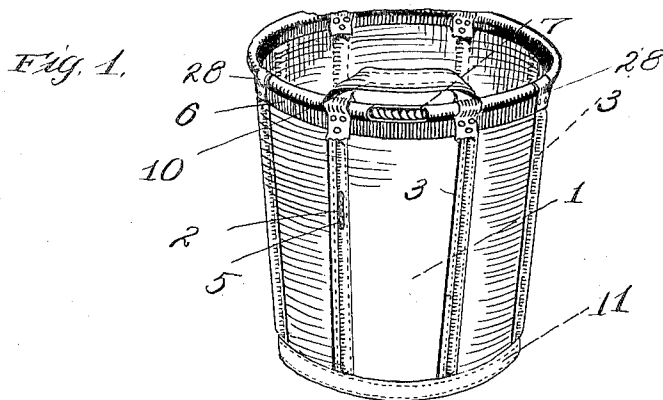


S. R. VAN PATTEN.
FLEXIBLE CONTAINER.
APPLICATION FILED JUNE 25, 1913.

1,087,702.

Patented Feb. 17, 1914.

2 SHEETS—SHEET 1.



Attest

L. O. Anderson

G. W. Paulschmidt,

Inventor

S. R. Van Patten

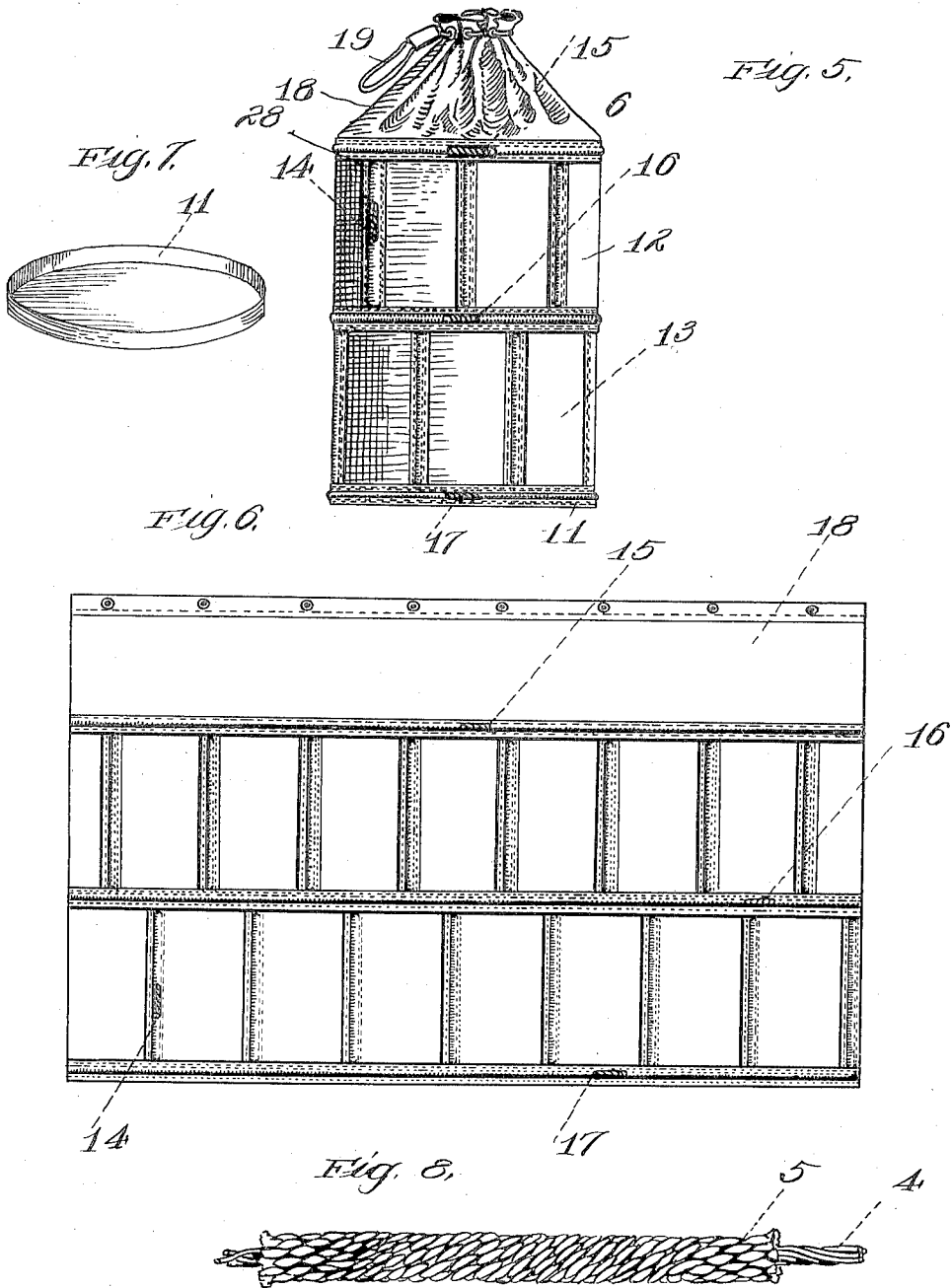
by *T. P. Ryan*
Atty.

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Attest.

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G. A. Hauberschnitt

Inventor

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by

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UNITED STATES PATENT OFFICE.

SAMUEL R. VAN PATTEN, OF ITHACA, NEW YORK.

FLEXIBLE CONTAINER.

1,087,702.

Specification of Letters Patent.

Patented Feb. 17, 1914.

Application filed June 25, 1913. Serial No. 775,625.

To all whom it may concern:

Be it known that I, SAMUEL R. VAN PATTEN, a citizen of the United States of America, residing at Ithaca, in the county of Tompkins and State of New York, have invented certain new and useful Improvements in Flexible Containers, of which the following is a specification.

This invention relates to flexible containers.

One object of the invention is to provide an efficient, durable and readily constructed flexible container, designed more particularly for handling coal in small quantities, but which shall be equally adaptable for use as a basket, hamper, parcel post bag, coal bag, and the like, in which by a novel arrangement of side stays and mouth distender the retention of the container in upright position with its mouth at all times fully open will be assured, together with the requisite yielding qualities to permit the container, when filled, readily to conform to the shoulders of the carrier, and thus not only reduce the labor of handling to the minimum, but also practically to eliminate strain and wear, and thereby measurably increase the life of the article.

A further object is to assemble the mouth distender and side stays in such manner as that there will be a mutual bracing of each at the mouth of the container, while allowing one to yield independently of the other, thus to protect the mouth from cutting due to the distortion of the container while being carried and emptied.

A further object is to provide a mouth distender of such character, that while being readily yieldable in all directions in use, breakage will practically be precluded, thus insuring the protection of that part of the container that is most liable to rapid deterioration.

With the above and other objects in view as will appear as the nature of the invention is better understood, the same consists in the novel construction and arrangement of parts of a flexible container, as will be hereinafter fully described and claimed.

In the accompanying drawings forming a part of this specification, and in which like characters of reference indicate corresponding parts:—Figure 1 is a view in perspective of a container, constructed in accordance with the present invention, and adapted

more particularly for handling coal. Fig. 2 is a detail view in plan of the container before being assembled to operative form. Fig. 3 is a perspective detail view of the bottom of the container. Fig. 4 is a detail of a portion of the mouth reinforce. Fig. 5 is a view in side elevation exhibiting the invention as applied to a parcel post bag. Fig. 6 is a plan view of the blank from which the body of the bag shown in Fig. 5 is constructed. Fig. 7 is a perspective detail view of the bottom of the bag, and Fig. 8 is a detail view of a portion of the reinforce used at the mouth, bottom, and intermediate portion of the body of the bag shown in Fig. 5.

Referring to the drawings, and to Figs. 1, 2, 3 and 4 thereof, there is exhibited a flexible container to constitute a coal sack, the same comprising a body 1 constructed preferably of heavy canvas of single, or multiply, the blank of which, as shown in Fig. 2, is so shaped that when the ends are assembled, a truncated cone-shaped structure is provided, which will permit nesting in the racks within each other.

Arranged at regular spaced intervals upon the body are stays 2, which are held in place by pockets 3 stitched, or otherwise secured to the body blank, and terminating short of the upper and lower ends of the structure, it being designed that there shall be no direct connection between the stays and the terminal portions of the structure, thus to permit ready yielding of the mouth of the container inwardly and outwardly, independently of the stays. The construction of the stays is one of the features of this invention, the object in view being to provide a stay which contains such inherent resiliency as to insure the retention of the sides of the container on straight lines and yet permit ready yielding as may be required. Each stay is composed of a cable 4, constructed preferably of high carbon steel, which is incased or inclosed by a sheath 5 of braided fibrous material. The object of the cable, which is highly resilient, is to insure the maintenance of the container in its designed form, while the non-resilient sheath serves to protect the pocket and the blank or body of the container from undue wear, or danger of cutting, which would otherwise result if the cable were merely contained within the pocket.

Arranged within a marginal pocket 6, formed by outturning the upper end of the blank and securing it to the body, is the distender 7, which utilizes in its construction the core above described and in addition a sleeve comprising two spirally wound resilient members 8 and 9, the whirls of which are oppositely curved in cross section and are interengaged, so that longitudinal movement of one relatively to the other is prevented, while the positive coaction between the two is assured. By combining the sleeve with the core, the former is not only reinforced, and has springiness added thereto, but all danger of breakage and thus the destruction of pocket 6 is obviated. By reason of the spiral arrangement of the two members of the sleeve, the distender as a whole will be free to yield inwardly when carried upon the shoulder, and will conform thereto, and thus materially lessen the labor of handling the loaded container, and also reduce the danger of breakage to a minimum.

As will be obvious, the greatest tendency to wear or cutting will be at the points where the stays terminate adjacent to the pocket 6, and to eliminate this objectionable feature, as far as possible, reinforcing tabs 28 are employed, which are passed around the pocket 6 on each side thereof, and are securely riveted to the body portion on each side of the stays. Thus, the continual bending of the distender due to use will not tend to cause the rupture of the fabric of the container at those points, so that the life of the article will be materially enhanced.

To facilitate handling of the container when filled, handles 10 are employed, which may be of any suitable flexible material, and held assembled with the body by rivets. The bottom 11 may be of the construction shown, or otherwise, that is to say, instead of being made as a separate element as shown in Figs. 1 and 5, it may be constructed of the lower portion of the body itself.

Where the invention is employed in the production of a parcel post bag, such as shown in Fig. 5, two connected body portions 12 and 13 are utilized, each of which is provided with stays 14, of the same general construction as those already described, and which are arranged in staggered order, and with three distenders 15, 16 and 17, each constructed in preferably the same manner as that above described, and disposed one at the mouth of the bag, the other at the bottom, and a third at an intermediate point. The upper portion of the bag is closed by a flexible mouth 18, such as is usually employed and with which is combined a sealing cord 19 of any preferred construction.

In assembling the distender with the con-

tainer shown in either Fig. 1 or 5, the core is drawn out some distance beyond one end of the sleeve, and the extended portion is inserted in the other end of the sleeve, thereby retaining the distender in circular form, so that when the pocket has been stitched or otherwise secured to the body portion, there will be no possibility of the ends of the sleeve becoming separated. By this arrangement, in connection with the spiral formation of the two members of the sleeve, the latter will be permitted to yield both longitudinally and laterally, thus to adapt the mouth to give in any direction under all conditions of use.

It will be seen from the foregoing description, that although the improvements herein defined are simple in character, that they will coact in the production of a thoroughly efficient and durable container, and one which will meet all the requirements that might arise in use.

What I claim is:—

1. A flexible container having a mouth distender comprising two intercoiled members of inherently resilient material constituting a sleeve, and a core disposed within the sleeve.

2. A flexible container having a mouth distender comprising two intercoiled members of inherently resilient material constituting a sleeve, and a core disposed within the sleeve and composed of a resilient metallic cable and a fibrous sheath.

3. A flexible container having a mouth distender comprising two intercoiled members of inherently resilient material constituting a sleeve, and a core disposed within the sleeve and composed of a resilient metallic cable and a fibrous sheath of braided material.

4. A container having a mouth distender comprising a longitudinally and transversely yieldable sleeve, and a resilient core having one terminal extended beyond one end of the sleeve and projected within the end of the sleeve.

5. A flexible container having a mouth distender, longitudinally disposed stays terminating short of the distender, and reinforcing forces passing around the distender and secured on each side of the stays.

6. A flexible container having a mouth distender comprising two spirally intercoiled and inherently resilient members, the whirls of which are transversely curved in opposite directions, presenting thereby reverse resistance to flexion, thus to insure the return of any part of the distender to normal position when relieved of a distorting force.

7. A flexible container having a mouth distender comprising a resilient core composed of a resilient cable and a non-resilient sheath inclosing the cable, and a sleeve housing the core and constructed of two spirally

intercoiled and inherently resilient members, the whirls of which are transversely curved in opposite directions.

8. A flexible container having a mouth
5 distender comprising a resilient core composed of a resilient cable and a non-resilient sheath inclosing the cable, and a sleeve housing the core and constructed of two spirally intercoiled and inherently resilient members,
10 the whirls of which are transversely curved in opposite directions, the core at one end

terminating short of the end of the sleeve and at the other end extending therebeyond, whereby to permit the insertion of the projecting end of the core into the sleeve to hold 15 the ends of the distender assembled.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL R. VAN PATTEN

Witnesses:

EDNAH E. HANCE,
FRED HAYES SMITH.
