

No. 815,783.

PATENTED MAR. 20, 1906.

J. W. BECHERER.
SIGNAL BOX OR PACKAGE.
APPLICATION FILED APR. 27, 1905.

2 SHEETS—SHEET 1.

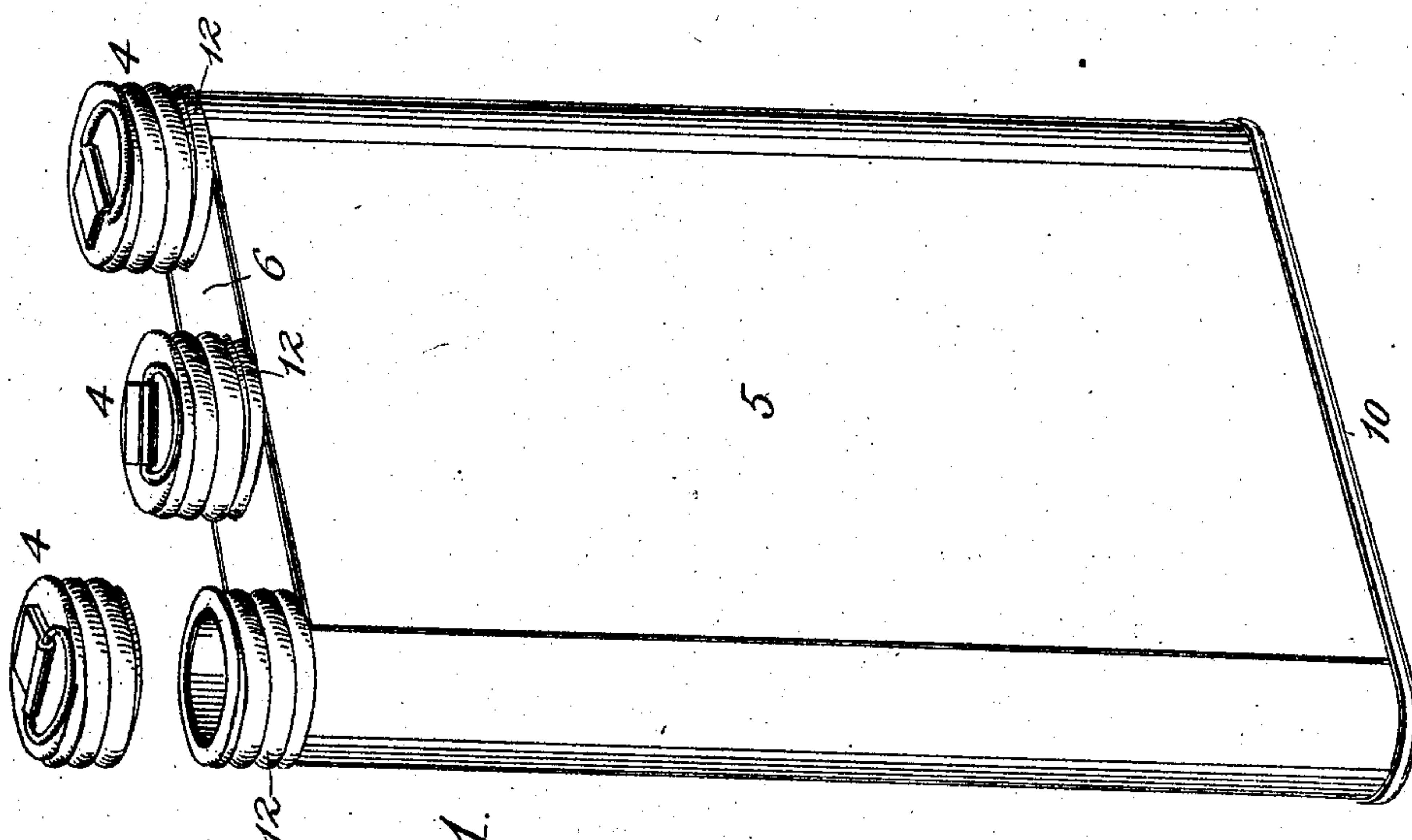
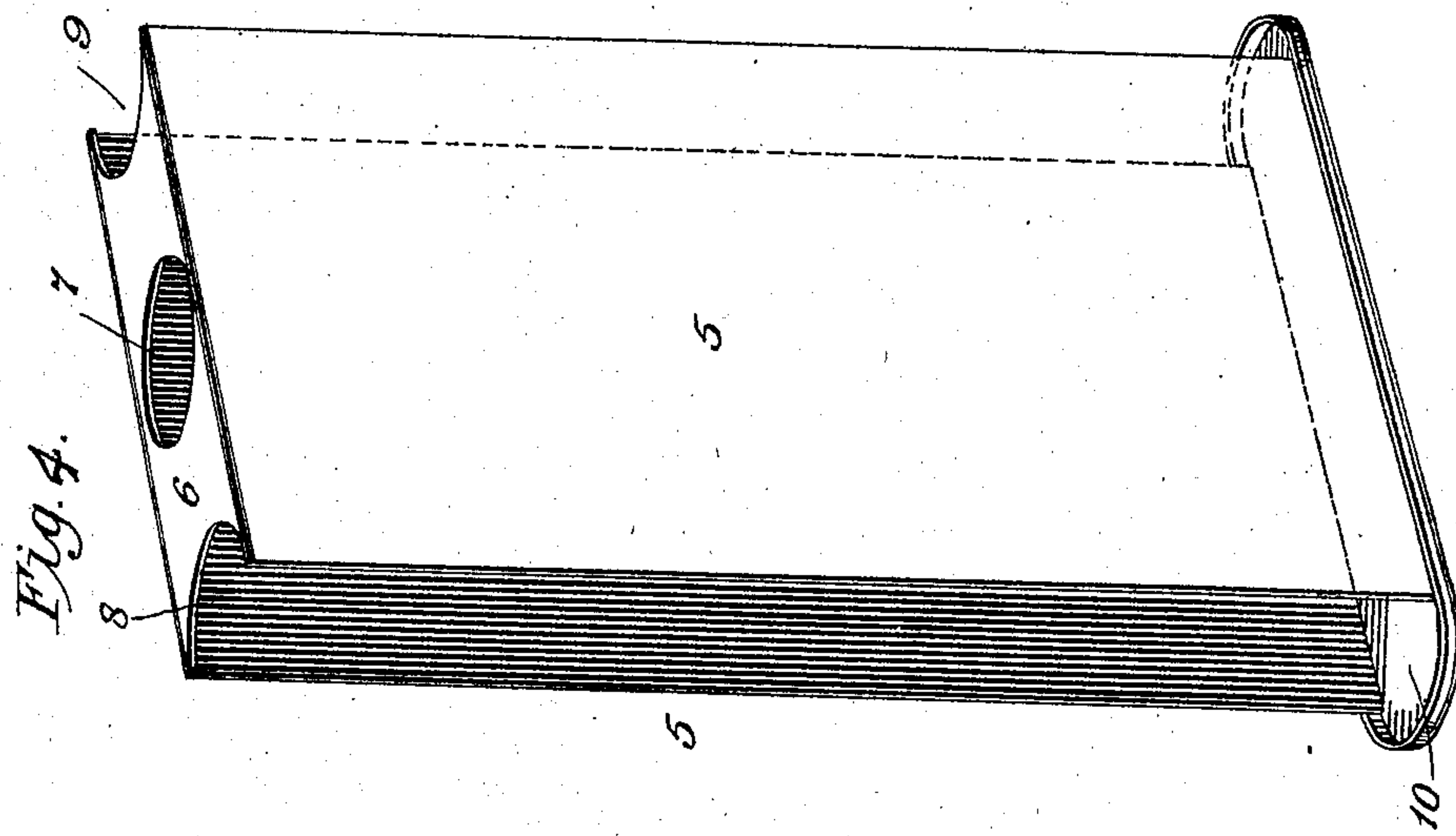


Fig. 1.

WITNESSES:

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INVENTOR

Jay W. Becherer
BY *P. T. Dodge*
Attorney

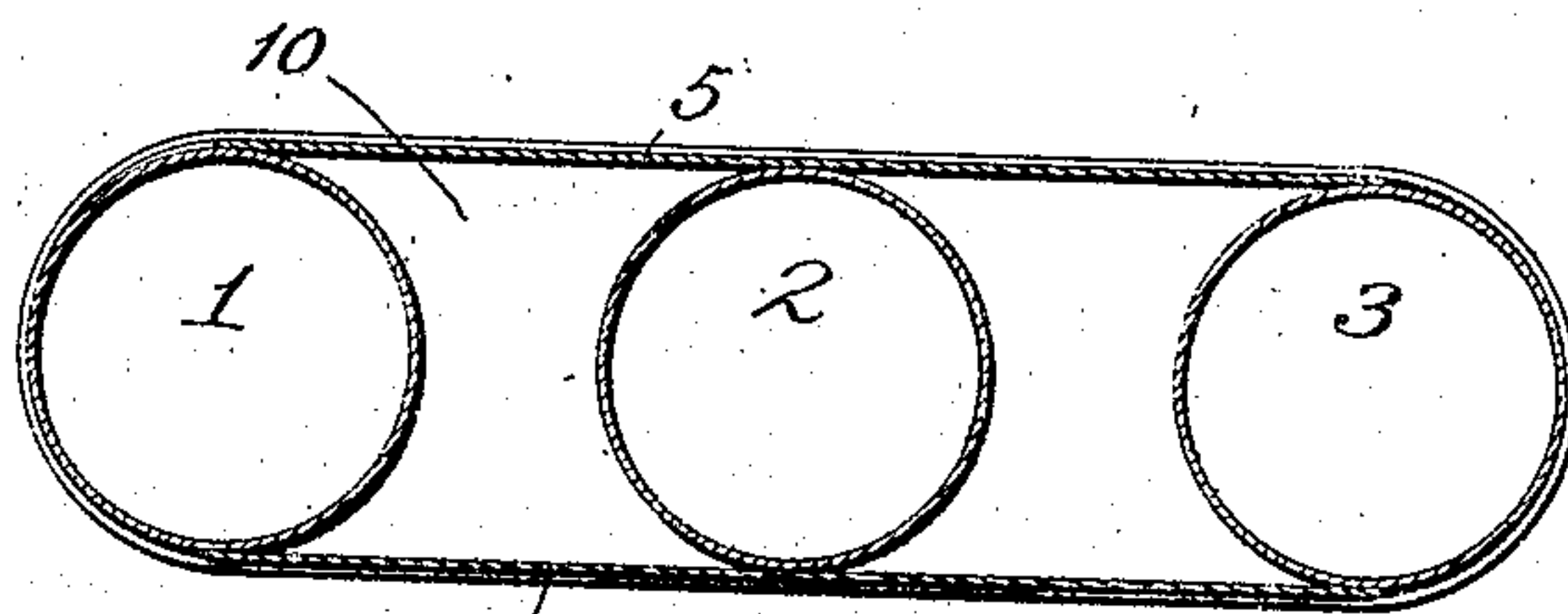
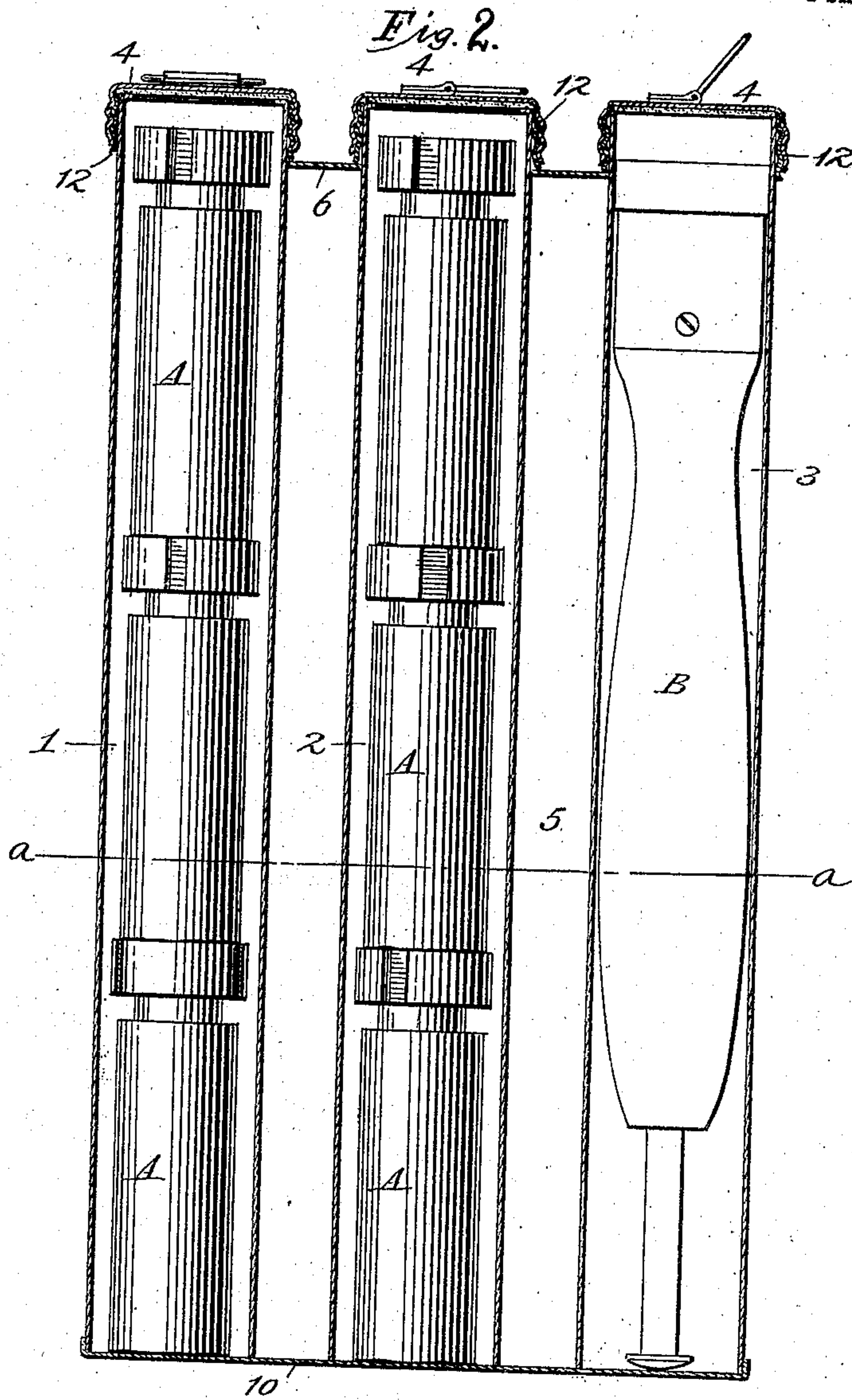
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2 SHEETS—SHEET 2.



WITNESSES:

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Fig. 3.

INVENTOR

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UNITED STATES PATENT OFFICE.

JAY W. BECHERER, OF BROOKLYN, NEW YORK, ASSIGNOR TO COSTON
SIGNAL COMPANY, A CORPORATION OF NEW YORK.

SIGNAL BOX OR PACKAGE.

No. 815,783.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed April 27, 1905. Serial No. 257,794.

To all whom it may concern:

Be it known that I, JAY W. BECHERER, of Brooklyn, county of Kings, and State of New York, have invented a new and useful
5 Improvement in Signal Boxes or Packages, of which the following is a specification.

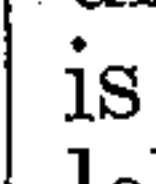
The object of this invention is to produce a portable water-tight compartment-box or carrying-case of compact form and of a construction adapted particularly for the safe
10 storage and carriage of the well-known Coston signal-lights now universally carried on merchant and other vessels for the purpose of signaling for aid in case of distress. These
15 signal-lights are manufactured in the form of cartridges, each containing different-colored burning lights and mounted on a cylindrical block adapted when the signal is to be burned to be inserted in a handle or holder having a
20 firing-pin which when actuated explodes a percussion-cap in the base of the cartridge and ignites the signal. The Board of Steamboat Inspectors of the United States Government have promulgated regulations re-
25 quiring that the life-boats and life-rafts carried by merchant vessels be equipped with a supply of these signals, the present regulations calling for six distress cartridges or signals and a firing-handle to be carried in a
30 water-tight box or case. My invention is designed, therefore, with special reference to the production of a carrying-case to meet these conditions; and the invention consists of a compartment-box comprising a number
35 of non-communicating water-tight compartments mounted and sustained in fixed relations in a casing and each compartment having one end open and provided with a movable water-tight closure, so that access may
40 be had to the interior of the compartments.

The invention consists also in the improved water-tight signal-package formed with a plurality of non-communicating compartments containing a designated equipment of
45 signals and a firing-handle.

The invention consists also in the details of construction and combination of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is
50 a perspective view of my improved compartment-box. Fig. 2 is a longitudinal vertical section through the same, showing the signal-cartridges and firing-handle in their respective compartments. Fig. 3 is a transverse sec-

tion on the line *a a* of Fig. 2. Fig. 4 is a per- 55
spective view of the sustaining-casing in which the tubular compartments are mounted and by which they are sustained in fixed relations.

Referring to the drawings, my improved 60
box comprises three tubular elongated compartments 1, 2, and 3, preferably constructed of sheet metal with their lower ends closed and their upper ends open and provided with
removable water-tight closures in the form of 65
removable caps 4. These compartments are constructed water-tight, so that when the caps are applied thereto the access of water or moisture to the interior of the compart-
ments is effectually prevented. The tubular 70
compartments are held in fixed relations side by side, so as to constitute a single flat portable body or case which is effected economically and conveniently by providing a sus-
taining-casing of the form represented more 75
particularly in Figs. 1 and 4. In these figures it will be seen that a single sheet of metal is bent into  shape, so as to form two parallel side walls 5 and a top 6, which top is provided with a central circular opening 7 and 80
has its ends formed with semicircular recesses 8 and 9. At the lower ends, the side walls are connected with a horizontal bottom plate 10, curved semicircularly at its ends and projecting beyond the edges of the side walls. 85
The sustaining-casing thus formed is adapted to give support to and hold in fixed relations the three tubular compartments before al-
luded to, the end compartments 1 and 3 be- 90
ing seated at their lower ends on the projecting ends of the plate 10 and extending between the edges of the side walls and seated
near the upper ends in the semicircular re- 95
cesses 8 and 9 in the top, the edges of the side walls being soldered or otherwise connected
to the sides of the tubes, as clearly indicated in Fig. 3. The central tubular compartment 2
is extended between the other compartments and within the side walls 5, its lower end rest- 100
ing on the bottom plate 10 and its upper end extending through the opening 7 in the top.
The upper ends of these three compartments terminate a short distance beyond the top of the casing and are provided with screw-
threads to receive the closing-caps 4, which 105
caps are correspondingly screw-threaded, so as to form a water-tight joint. I prefer, as shown, to form the screw-threads in collars

12 and solder or otherwise fasten these collars over the projecting ends of the tubes; but of course the threads may be formed in the ends of the tubes. The tubular compartments are of such size that there is sufficient space for the storage of three signal-cartridges A in each compartment, so that the full number or equipment 6 demanded by the regulations may be stored in the two compartments 1 and 2, the firing-handle B being stored in the other compartment 3.

In the construction described it will be seen that I have produced a water-tight readily-accessible package containing a full signal equipment, such as is demanded that every life-boat and life-raft shall carry. The package as a whole is in compact conveniently portable form, is of such construction that the signals will be protected against the access of water or moisture, so that under the conditions usually encountered on the high seas the signals are at all times ready for use in case of distress.

An important feature of my invention resides in the fact that the three compartments are wholly and entirely independent of each other—that is to say, each is complete in itself, there being no division-plate or separate wall common to two adjoining compartments and serving as a wall for both compartments. As shown in Fig. 3, the compartment 1 is provided with its continuous tubular closing-wall which is separated from and independent of the wall of the next compartment 2, which latter is in like manner separated from and independent of the wall of the next compartment 3. These three tubular compartments are sustained, however, in fixed relations and their separation maintained by the sustaining and inclosing casing, which serves as a means for holding the tubular compartments in fixed relations and in the form of a flat compact single body.

The construction described greatly reduces the liability of injury to one compartment affecting the next, for one of the compartments may be destroyed throughout without affecting the next compartment, which would not be the case with a common dividing-wall employed to separate two adjoining compartments.

In the practical use of the device, more particularly under conditions encountered in times of war, there is considerable danger of the box being perforated by bullets, and it is of the greatest importance that the danger of

the injury or perforation of one compartment affecting another be reduced to a minimum. A leakage of water into one compartment if it finds its way into the next would destroy or render unfit for use the entire supply of signals. By having the three tubular compartments entirely independent of each other, with its complete and continuous closing-wall separated from the others, the risk of leakage from one compartment to the other is greatly reduced.

Having thus described my invention, what I claim is—

1. In a compartment-box the combination with a sustaining-casing having a top, recesses in its ends, side walls connected to the edges of the top, and a bottom plate connected with the lower ends of the side walls, of tubular compartments seated on the bottom plate and in the recesses in the top, with the edges of the side walls connected to said compartments, and closures for the ends of said compartments.

2. In a compartment-box the combination with a sustaining-casing having a top formed with an opening therethrough, and having recesses in its ends, side walls connected with the top, and a bottom plate connected with the lower ends of the side walls and extending at its ends beyond said walls, of two tubular compartments seated respectively on the projecting ends of the bottom plate and in the recesses in the top, the side walls being connected to said tubular compartments along the sides of the same, and an intermediate tubular compartment extending through the opening in the top and within the side walls between the end compartments, and closures for the upper ends of said tubular compartments.

3. In a compartment-box the combination of a flat sustaining-casing provided with side walls, a plurality of independent tubular bodies arranged side by side between the said walls of the casing with the outer edges of the casing secured along the sides of the two tubular end bodies, leaving the outer sides of said tubular bodies exposed, and closures for said tubular bodies.

In testimony whereof I hereunto set my hand, this 25th day of April, 1905, in the presence of two attesting witnesses.

JAY W. BECHERER.

Witnesses:

HARRY J. B. YOUNG,
HARRY E. SYPERREK.