H. R. BLISS.

SHIPPING CASE.

APPLICATION FILED SEPT. 7, 1920.

1,414,067.

Patented Apr. 25, 1922.

4 SHEETS—SHEET 1.

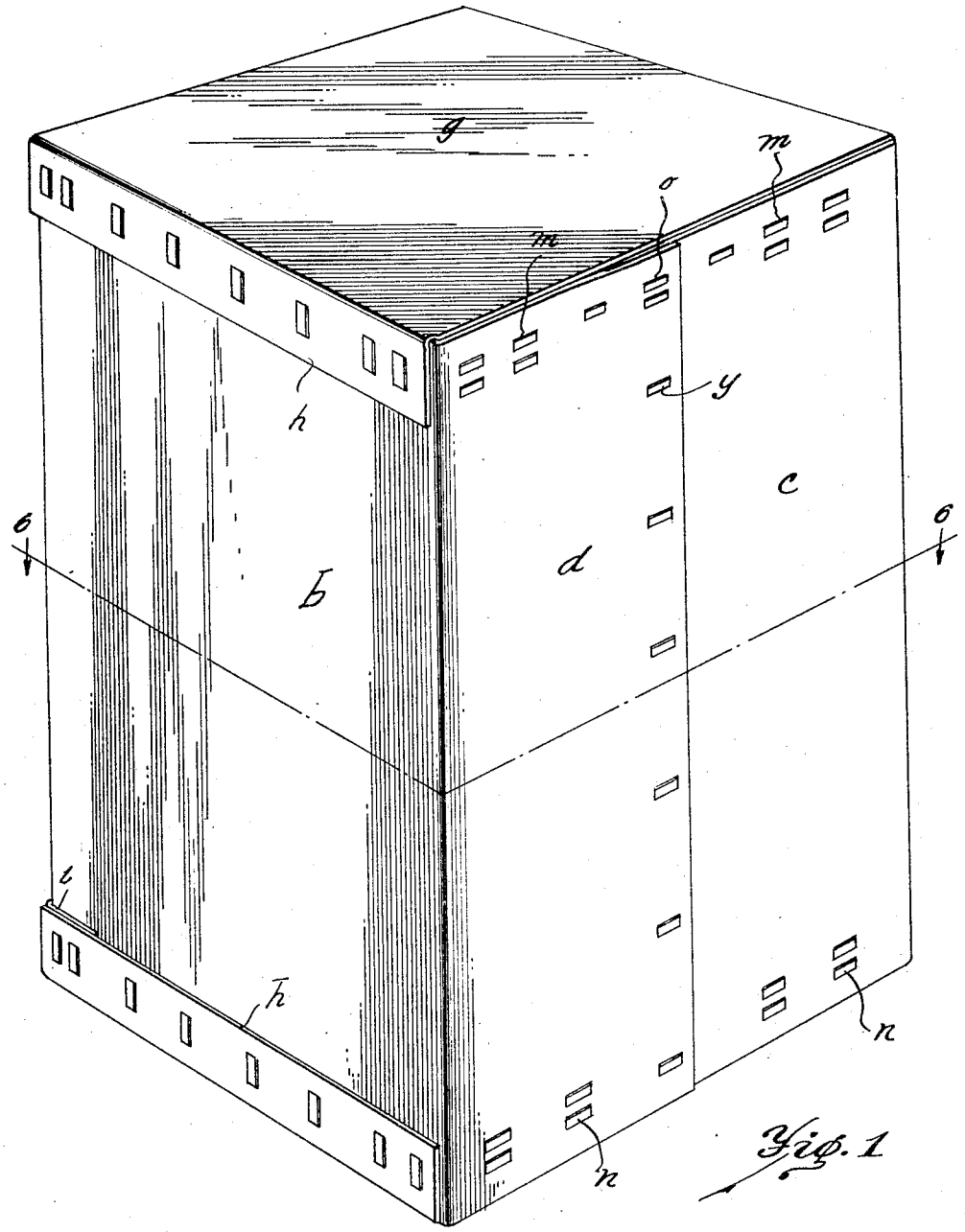


Fig. 1

WITNESSES:

G. H. Hauke.

INVENTOR.

HERBERT R. BLISS.

BY Stuart B. Barnes

ATTORNEY

H. R. BLISS.

SHIPPING CASE.

APPLICATION FILED SEPT. 7, 1920.

1,414,067.

Patented Apr. 25, 1922.

4 SHEETS—SHEET 2.

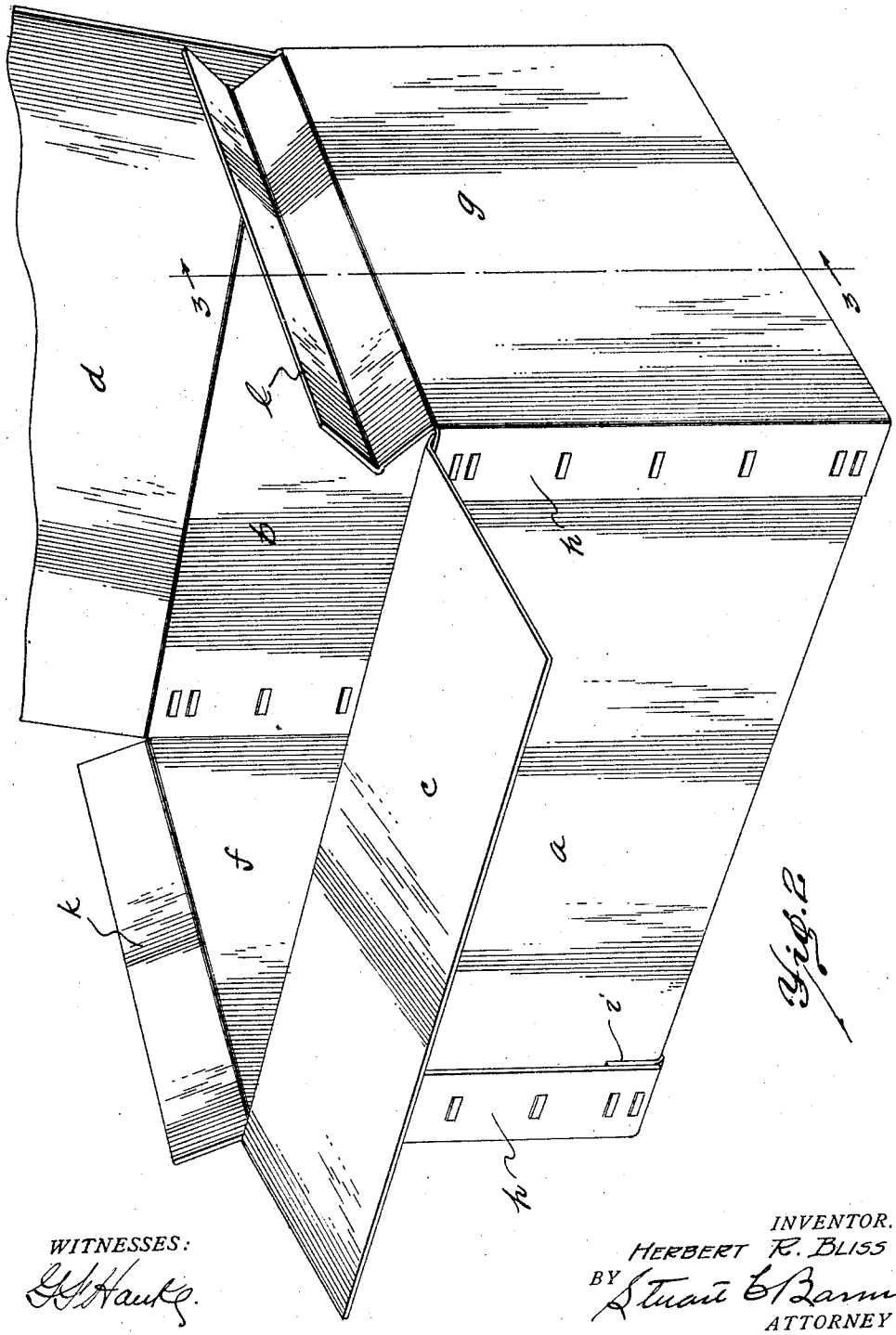


Fig. 2.

WITNESSES:

G. G. Hauke.

INVENTOR.

HERBERT R. BLISS

BY Stuart G. Barnes

ATTORNEY

H. R. BLISS.

SHIPPING CASE.

APPLICATION FILED SEPT. 7, 1920.

1,414,067. Patented Apr. 25, 1922.

4 SHEETS—SHEET 3.

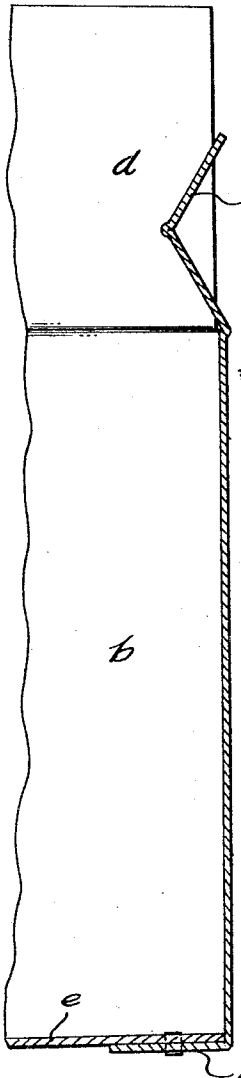


Fig. 3

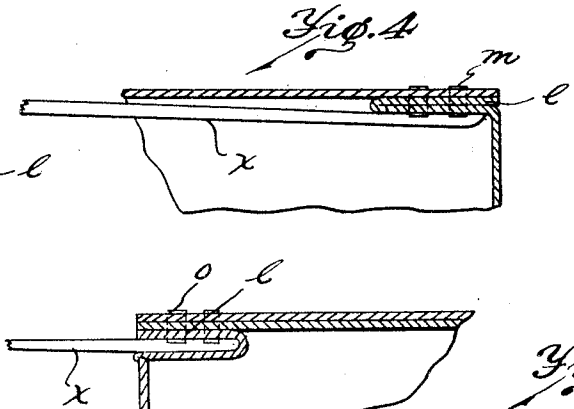


Fig. 4

Fig. 10

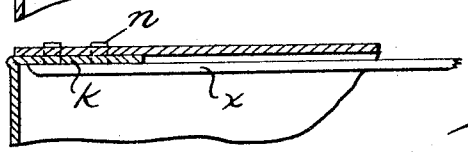


Fig. 5

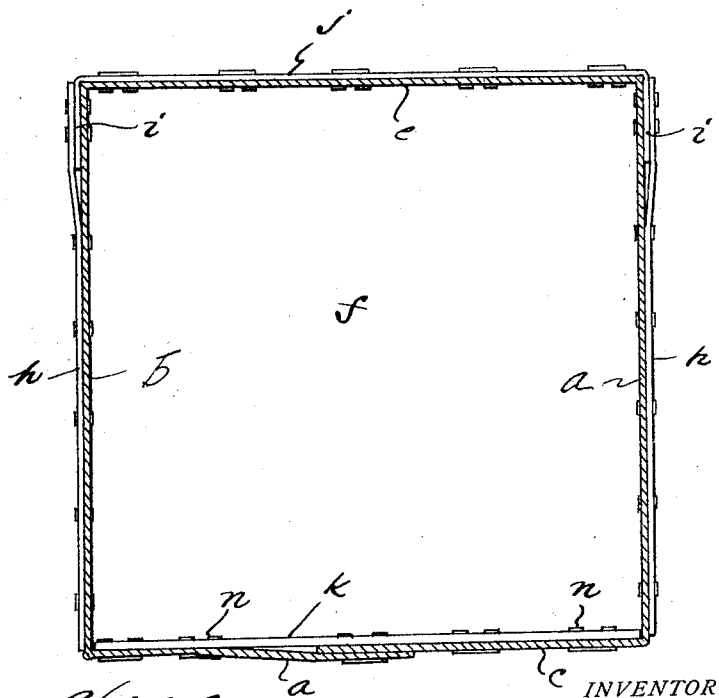


Fig. 6

WITNESSES:

INVENTOR.
HERBERT R. BLISS.
BY Stuart G. Barnes
ATTORNEY

H. R. BLISS.

SHIPPING CASE.

APPLICATION FILED SEPT. 7, 1920.

1,414,067. Patented Apr. 25, 1922.

4 SHEETS—SHEET 4.

Fig. 7

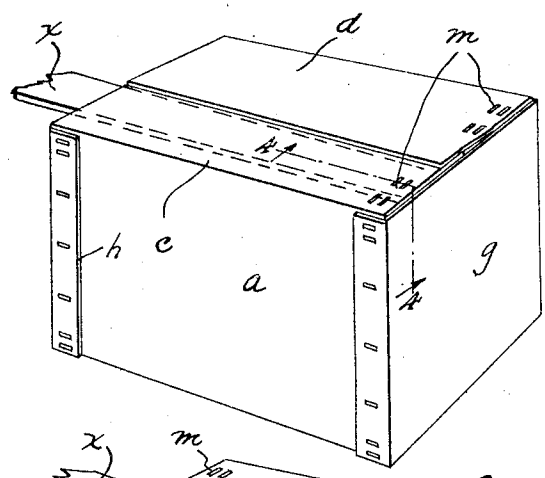


Fig. 8

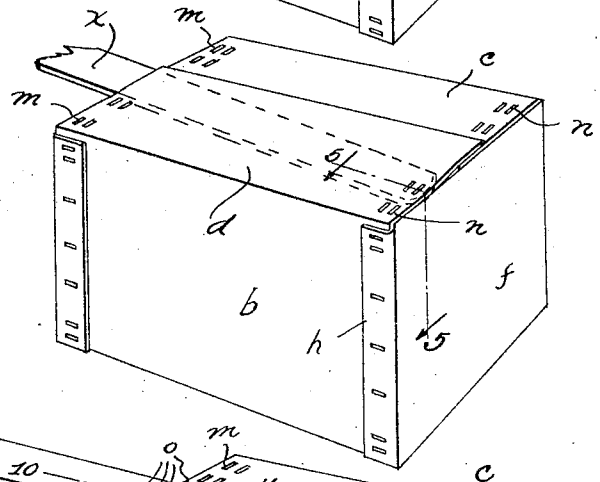
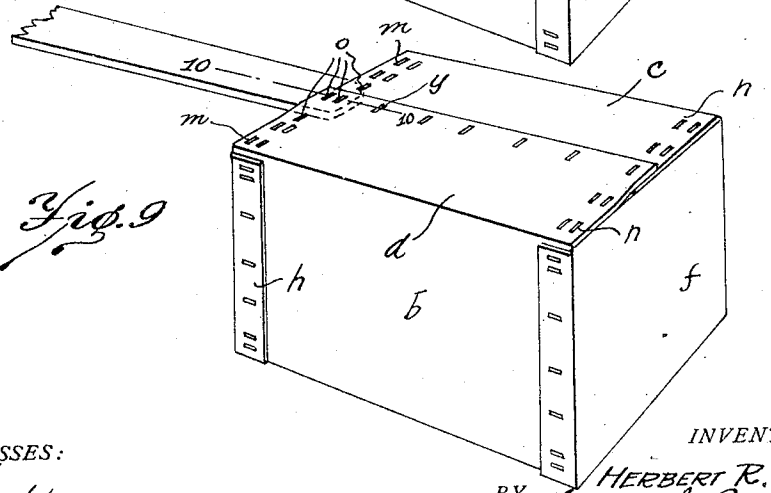


Fig. 9



WITNESSES:

G. L. Hauke.

INVENTOR.

HERBERT R. BLISS.

BY Stuart B. Barnes

ATTORNEY

UNITED STATES PATENT OFFICE.

HERBERT R. BLISS, OF NIAGARA FALLS, NEW YORK.

SHIPPING CASE.

1,414,067. Specification of Letters Patent. Patented Apr. 25, 1922.

Application filed September 7, 1920. Serial No. 408,638.

To all whom it may concern:

Be it known that I, HERBERT R. BLISS, a citizen of the United States, residing at Niagara Falls, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Shipping Cases, of which the following is a specification.

This invention relates to fiber shipping cases or similar boxes.

It is the object of this invention to provide a shipping case constructed of fiber board or similar material and in such a way as to utilize a minimum of material and secure a maximum strength. This box possesses several useful characteristics. One of them is that the same can be packed the long way of the box. It is sealed by wire stitching, which is the strongest and most secure way of fastening the flaps together. It utilizes the full capacity of its dimensions as a container as distinguished from the so-called recessed end containers. These and other features will be better understood when the construction of the box is made known.

In the drawings,—

Fig. 1 is a perspective of the finished box sealed and ready for shipment.

Fig. 2 is a perspective of the box with the flaps open, ready for packing.

Fig. 3 is a fragmentary section on the line 3—3 of Fig. 2.

Fig. 4 is a section on the line 4—4 of Fig. 7.

Fig. 5 is a section on the line 5—5 of Fig. 8.

Fig. 6 is a cross section on the line 6—6 of Fig. 1.

Figs. 7, 8 and 9 are perspectives showing how the case is sealed with the aid of a blade-like anvil.

Fig. 10 is a section on the line 10—10 of Fig. 9.

An examination of Fig. 2 in connection with Fig. 3 and Fig. 6 will indicate the character of the blanks that are necessary to make the case. There is a main blank which forms the two side walls *a* and *b* and the flaps *c* and *d* and the bottom *e*. This blank is simply creased and folded up to the position shown in Fig. 2. The end walls *f* and *g* are each formed of a single blank having side wings *h* which engage the outside of the side walls *a* and *b* and the bottom wings *j* which engage the bottom *e* on the outside and that have end extensions *i* that extend up under the side wings *h* and are secured thereunder. These end walls *f* and *g* are secured to the side walls and bottom of the main blank by turning the wings over the outside of the folded-up main blank, as shown in Fig. 2, and wire-stitching the wings to the main blank. This, it will be seen, leaves the main or closure flaps *c* and *d* free and also the smaller or sealing flap *k* and the doubled-back sealing flap *l* free.

Now, by examining Figs. 7, 8 and 9, it will be evident how the case is sealed. First the anvil is run in over the turned-down flap *k* and under the doubled-back flap *l*. This is shown in Fig 4, which is a section on the line 4—4 of Fig. 7. The stitches *m*, *m*, two sets at each side of the box, are taken, leaving an open space at the center or directly under the overlapping edges of the flaps *c* and *d*. The box is then reversed end for end and the anvil inserted in the central opening left between the stitches *m*, *m*. The anvil is then inserted under the flap *k* as shown in Fig. 5 and the stitches *n* taken. These are double stitches preferably. The anvil is then run down the middle of the box, stitching together the overlapping main flaps *c* and *d*, until finally the anvil is withdrawn after the stitch *y* has been taken. The anvil is then inserted under the outer flap portion of the double flap *l*, as shown in Fig. 10, and the stitches *o* driven in. This completes the case and very securely seals the same.

In speaking of the anvil being inserted and moved about in the context above, we have in mind, of course, the driving of the fasteners as a hand operation and the more generic aspects of the invention. In practice the process would be performed by using a wire-stitching machine and an anvil such as shown in my Patent #1,174,943. With a stationary anvil, the box is simply moved around on the anvil retaining the same relative positions as described above.

From the above description it will be evident that the box is constructed of a minimum amount of material. The blanks are all substantially rectangular in shape and yet no great amount of material is necessary in order to effect the sealing. The box is even more economical than that described in

my previous application No. 354,173 and is capable of being packed and sealed along the long side of the box.

What I claim is:

1. A shipping case constructed of fiber board or equivalent material, having in combination, side walls, end walls and a bottom all connected together perpendicularly at their extreme edge, the tops of the side walls and end walls provided with a set of main flaps and a set of smaller flaps, one of the latter being a double folded flap, the smaller flaps being folded under the overlapped main flaps which are fastened together and to the smaller flaps, the final fastening being solely to the main flaps and the outer flap portion of the folded smaller flap.

2. A shipping case constructed of fiber board or equivalent material, comprising side walls, end walls and a bottom all connected together, the tops of the side and end walls being provided with a pair of main flaps and a pair of smaller flaps, one of the latter being a double folded flap, the main flaps being overlapped over the smaller flaps and united thereto by metal fasteners, the final sealing being effected by clinching the metal fasteners on the under side of the outer portion of the folded smaller flap.

3. In a shipping case, walls one of which is provided with a small double folded flap folded in perpendicular to the main body of the wall and having the outer portion folded back outward, and a sealing flap fastened to said double folded flap by fasteners driven into the outer portion of the double folded flap and clinched between the two portions of such double folded flap.

4. In a shipping case, walls one of which is provided with a double folded flap folded in to an angular position and the outer portion turned back outward, and a second flap stitched to said outer portion only.

In testimony whereof I affix my signature.

HERBERT R. BLISS.