No. 783,971. PATENTED FEB. 28, 1905.

C. W. MEINECKE & D. HOGAN.

SPUTUM CUP AND HOLDER OR CONTAINER THEREFOR.

APPLICATION FILED MAR. 28, 1904.

3 SHEETS—SHEET 1.

Fig. 1.

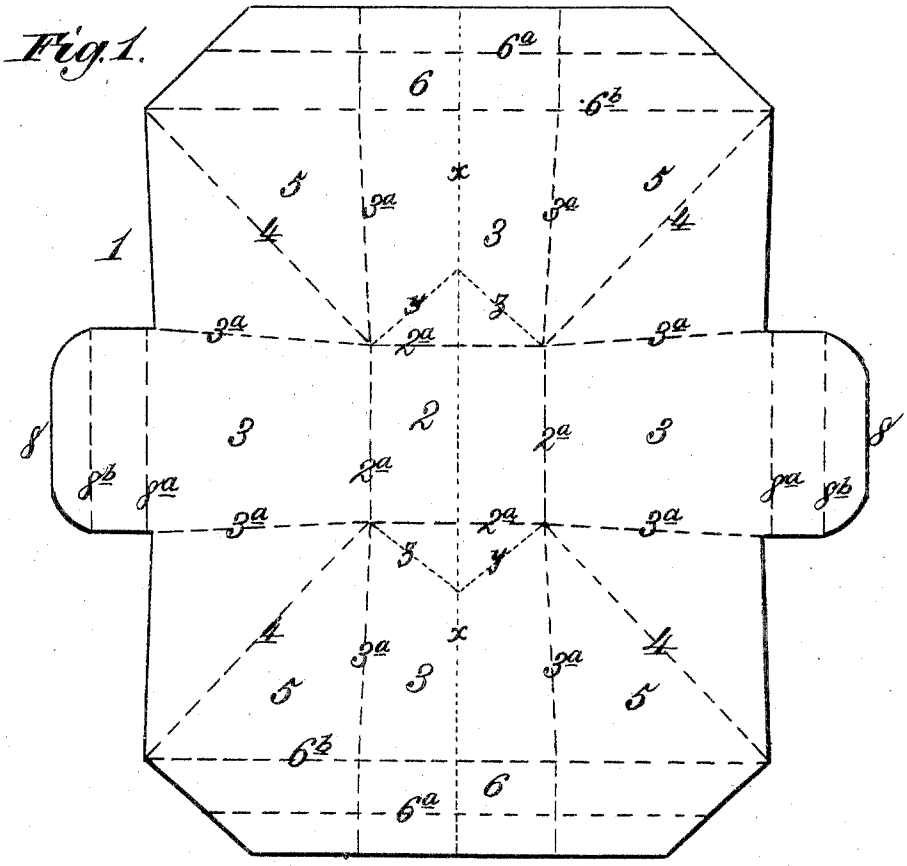
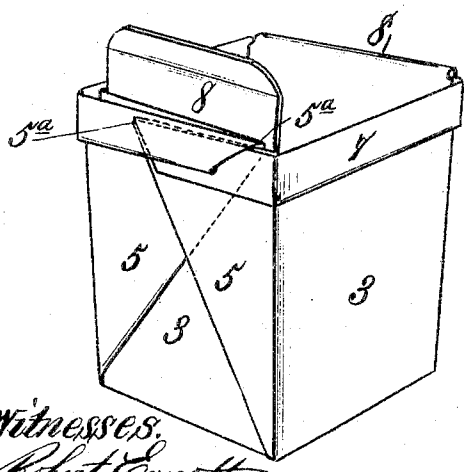
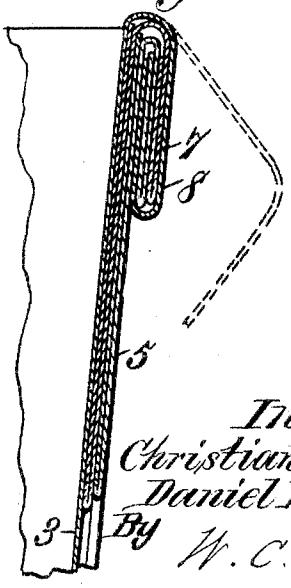


Fig. 2.



Witnesses.
Robert Emmett.
S. O. Parker

Fig. 3.



Inventors.
Christian Wm. Meinecke.
Daniel Hogan.
By W. C. Hauff Atty.

PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 783,971. PATENTED FEB. 28, 1905.

C. W. MEINECKE & D. HOGAN.

SPUTUM CUP AND HOLDER OR CONTAINER THEREFOR.

APPLICATION FILED MAR. 28, 1904.

3 SHEETS—SHEET 2.

Fig. 4.

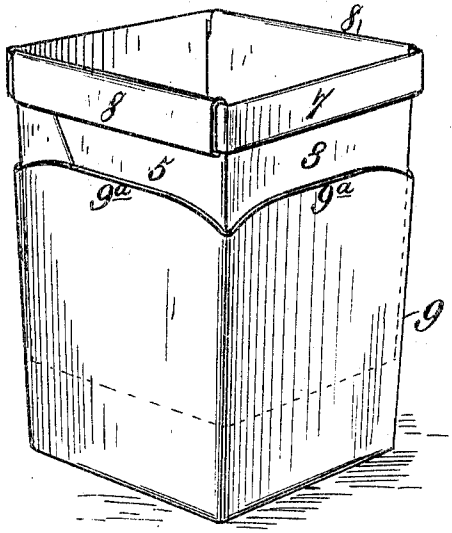


Fig. 5.

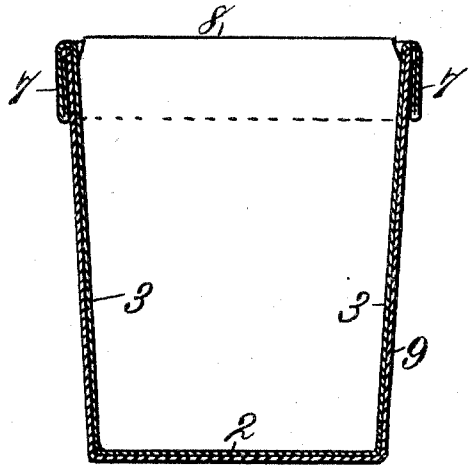


Fig. 6.

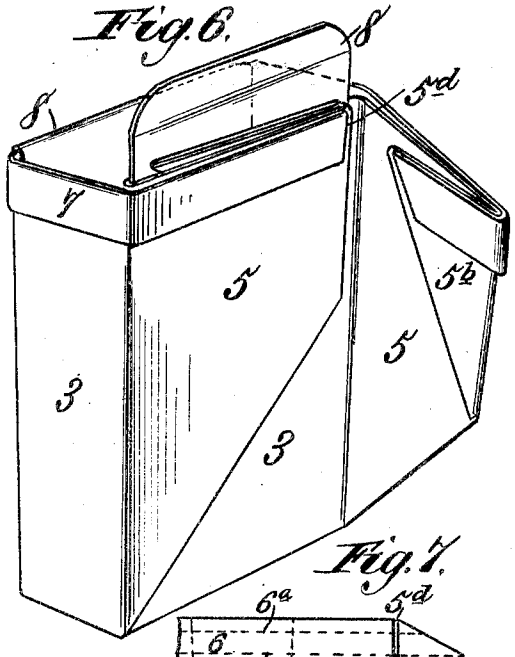


Fig. 8.

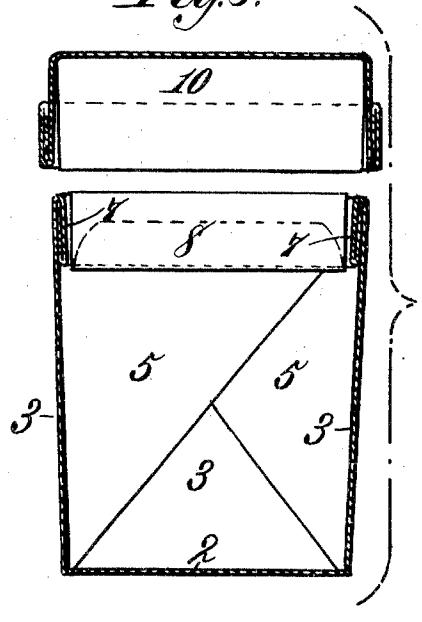
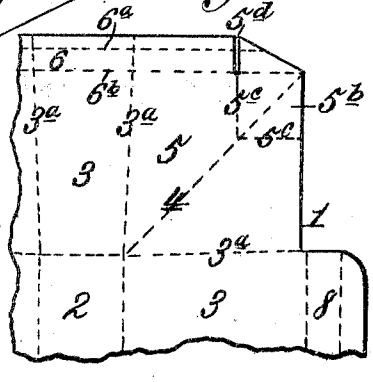


Fig. 7.



Witnesses.
Robt Smith.
B. O Parker

Inventors.
Christian Wm Meinecke.
Daniel Hogan.
By W. C. Hauff
Atty.

PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 783,971. PATENTED FEB. 28, 1905.

C. W. MEINECKE & D. HOGAN.

SPUTUM CUP AND HOLDER OR CONTAINER THEREFOR.

APPLICATION FILED MAR. 28, 1904.

3 SHEETS—SHEET 3.

Fig. 9.

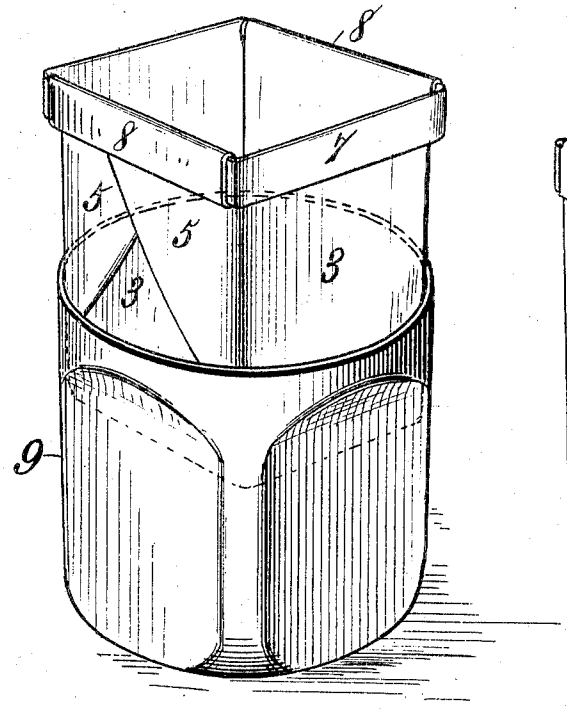
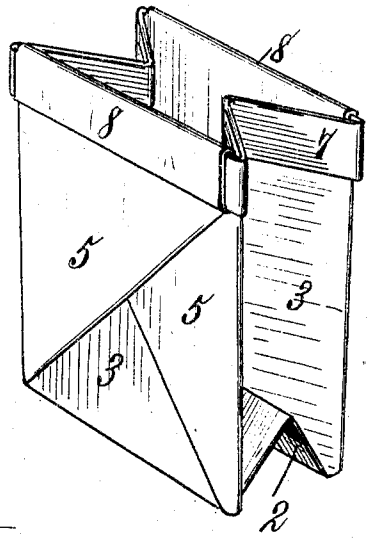


Fig. 10



Witnesses.
Robt Everett.
F. O. Parker

Inventors.
Christian Wm Meinecke.
Daniel Hogan.
By
W. C. Hauff
Attys.

PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 783,971. Patented February 28, 1905.

UNITED STATES PATENT OFFICE.

CHRISTIAN WM. MEINECKE, OF JERSEY CITY, AND DANIEL HOGAN, OF HOBOKEN, NEW JERSEY, ASSIGNORS TO MEINECKE & CO., OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

SPUTUM-CUP AND HOLDER OR CONTAINER THEREFOR.

SPECIFICATION forming part of Letters Patent No. 783,971, dated February 28, 1905.

Application filed March 28, 1904. Serial No. 200,479.

To all whom it may concern:

Be it known that we, CHRISTIAN WM. MEINECKE, residing at Jersey City, and DANIEL HOGAN, residing at Hoboken, in the county of Hudson, State of New Jersey, both citizens of the United States, have invented new and useful Improvements in Sputum-Cups and Holders or Containers Therefor, of which the following is a specification.

Our invention relates to improvements in sputum-cups, and has for its object to provide a cup of this character of waterproof paper and possessing a novel and economical construction, a cup which is leak-proof and has no obstruction of the opening thereinto or to inspection of the contents by a physician.

The invention has for its further object to provide a sputum-cup of the character described in combination with a holder or container therefor, the cup being provided with an overhanging exterior flange which constitutes a pocket to receive the upper edge of the holder or container and prevents entrance of matter into the container between the walls of said container and the walls of the sputum-cup.

In hospitals or sanitariums for the treatment of patients suffering with consumption the need is felt for a sputum-cup which will be, first, exceedingly economical, so that it may be destroyed after use; second, that it shall be sanitary; third, that it shall be waterproof, or, in other words, leak-proof; fourth, that it shall have no obstruction to the free entry of sputum and easy inspection of the contents by a physician. All of these requirements are filled by sputum-cups constructed according to our invention. It is also a matter of very great convenience and, in fact, of necessity that patients shall have a sputum-cup which can be conveniently carried about the person, as in a pocket of the clothing, possessing the attributes above referred to.

In hospitals and sanitariums, where the sputum-cups are not carried on the person, it is desirable oftentimes to arrange the same in a holder or container, and when this is done that possibility of entrance of any matter between the walls of the cup and the walls of the container shall be guarded against, and that the cup may be removed from the container easily by the patient or attendant sanitarily. These considerations are also filled in sputum-cups constructed according to our invention.

Having the objects hereinbefore set forth, our invention consists in a sputum-cup as hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a plan view of the blank from which our improved sputum-cups are constructed. Fig. 2 is a perspective view showing a sputum-cup constructed according to our invention complete with the exception of the final locking thereof into permanent form. Fig. 3 is a sectional view taken on the line 2 2 of Fig. 2—that is to say, through that end of the wall of the cup which is fully completed—and showing in dotted lines the locking-tongue before it has assumed its locking position and in full lines showing the said tongue in locking position. Fig. 4 is a perspective view of a completed sputum-cup and a holder or container therefor, the cup being partially inserted in said holder or container. Fig. 5 is a sectional view of the cup and holder or container, the cup being arranged in said holder or container. Fig. 6 is a perspective view of a different form of cup partially completed and illustrating a modification of fold essential when this form of cup is constructed. Fig. 7 is an enlarged view showing a detail involved in the construction of the cup illustrated in Fig. 6. Fig. 8 is a sectional view of a modified form of sputum-cup and a cover therefor. Fig. 9 is a perspective view of the cup arranged in connection with a different form of holder or container. Fig. 10 is a view of the cup collapsed upon itself.

In said drawings, and referring particularly to Fig. 1 thereof, the reference-numeral 1 designates a blank of waterproof paper, such as paraffined or waxed paper, of which the cup is constructed. This blank, as shown, has a center portion 2, that constitutes the bottom of the completed cup, which bottom

is defined by creased lines 2^a. The blank has wings 3 radiating from the central part 2 thereof and constituting the walls of the cup, which wings are provided with creased lines 3^a to define the line of fold to bring the blank into a substantially rectangular cup shape, those portions of the wings between adjacent fold-lines 3^a being folded upon themselves along the creased lines 4 to form darts 5, which constitute flaps that are folded against the side walls of the cup and are held by means of the hereinafter-described interlocking ends, as best shown in Fig. 2 of the drawings. At diametrically opposite edges of the blank are reinforce extensions 6, defined by creased lines 6^a and 6^b. Preferably these reinforce extensions have a double fold, first along the creased line 6^b and then in addition along the creased line 6^a, so as to provide in the completed cup and, as illustrated in Figs. 2 and 3 of the drawings particularly, a double reinforce-flange 7, which when the locking-tongues are engaged therewith, as hereinafter described, constitutes an endless reinforcing-flange around the top edge of the cup; but our invention is not restricted to the double-fold idea, although that is preferable. As shown in all of the drawings except Fig. 8 this reinforce-flange 7 is disposed upon the exterior of the cup, for the purpose hereinafter described, and in Fig. 8 upon the interior of the cup, as will be referred to. The overhanging flanges of the flaps 5, as best shown in Fig. 2, are interlocked, the edge of the one being passed under the overhanging flange 7 of the other, whereby the form of the cup is primarily maintained, for, it will be observed upon reference to Fig. 2, that the form of the cup cannot be altered or destroyed by the walls falling away from each other, because in such falling away of the walls the points 5^a of the flaps would have to move in arcs of circles, and the interlocking of said flaps, as described and shown, prevents this and avoids the accidental falling away of the walls of the cup. At diametrically opposite edges of the blank are provided locking-tongues 8, which may be provided with creased fold-lines 8^a and 8^b. When the blank has been folded to the extent hereinbefore described, one of the locking-tongues 8 is in the position illustrated in Fig. 2 of the drawings, the locking-tongue at the opposite wall of the cup being illustrated as having assumed its locking position. The locking-tongue (shown in Fig. 2 of the drawings in position to be folded about and into engagement to further lock the interlocked ends of the reinforce-flange) is first folded along the line 8^a in front of the interlocked ends of the reinforce-flange, and the free end of the locking-tongue is passed up behind the said interlocked ends of the reinforce-flange, being folded along the line 8^b, as clearly shown in Fig. 3 of the drawings. In this manner is provided a waterproof paper sputum-cup simple of manufacture and exceedingly economical; yet at the same time it is an efficient article for the purposes intended, possessing the characteristic of sanitariness and substantial durability of form. The opening into the cup is unobstructed—a consideration of great importance in respect of cleanliness, free or easy entrance of the sputum, and facility of inspection of the contents by a physician. The cup as thus constructed may be used in and of itself as a complete article and after use may be burned in a furnace, as is desirable in case of such articles. It may be, however, and preferably is, when used in a hospital or sanitarium or sick-room combined with a rigid holder or container of metal or other suitable material, as illustrated in Figs. 4 and 5 of the drawings, wherein the reference-numeral 9 designates the holder or container. This holder or container may be of any suitable form or shape, and preferably the top edge of the holder or container will be provided with guide extensions 9^a to facilitate the entrance of the edge of the holder or container beneath the reinforce-flange of the sputum-cup, as shown in Fig. 5 of the drawings. The holder can be of various forms—as, for example, rectangular or four-sided, as shown in Fig. 4, or of polygonal or cylindrical or mixed form—as the flexible or paper cup and flange will conform to the shape of the holder. In Fig. 9 is shown a holder with cylindrical mouth or top and flat-sided body. When the cup is used in connection with a cylindrical-mouthed holder or container, such as shown in Fig. 9, or a polygonal or other such shaped mouth, the pliable paper cup will assume the shape of the holder. For instance, if an ordinary drinking-glass, goblet, or tin drinking-cup should be used for a holder the paper cup could be inserted thereinto as well as into a rectangular holder

When the sputum-cup is to be used in connection with a holder or container, the reinforced flange is disposed exteriorly of the walls of the cup, as shown, so that the edge of the holder or container can pass up between said flange and the walls of the cup, whereby the edge of the holder or container is inclosed and concealed by said flange, thus rendering it impossible for any matter to find its way into the holder or container between the walls thereof and the walls of the cup. This is a very desirable feature in the interest of sanitariness and cleanliness.

In Fig. 8 of the drawings is shown a sputum-cup constructed of the same manner of blank illustrated in Fig. 1 of the drawings, differing from the sputum-cups of the remaining figures of the drawings only in that the flaps 5 and the reinforce-flange are folded interiorly of the walls of the cup instead of exteriorly thereof, the side flaps being interlocked to-

gether and further locked by means of the locking-tongues in the manner hereinbefore set forth.

To provide a sputum-cup of perhaps a more suitable character to be carried about the person of a patient, as in a pocket, the form thereof is modified, being made relatively narrow as compared with length or depth. Such a form of sputum-cup is illustrated in Fig. 6 of the drawings. This is made up of the blank illustrated in Fig. 1 of the drawings, the fold of the flaps being modified only in the particular that the ends 5^b thereof (see Fig. 6) are folded in against the body of the flaps along the lines 5^c (see Fig. 7 of the drawings) into the position shown in Fig. 6 of the drawings to take up the surplus length of the flaps incident to a cup of this narrow form, and to enable the folds to be interlocked the one with the other slits 5^d are provided in the blank, which slits are in alinement with the line of the fold of the ends 5^b of the flaps, as shown in Fig. 7, so that when the flaps are folded against the walls of the cup one flap may be passed beneath the reinforce-flange of the other flap into interlocking engagement, passing into or through the slit 5^d, as will be apparent from an inspection of Fig. 6 of the drawings. Otherwise this form of cup illustrated in Fig. 6 is the same or constructed in the same manner as the cup illustrated in Figs. 2 and 4, for example. Obviously it may be constructed like the cup shown in Fig. 8 of the drawings, the only difference being that instead of the flaps being folded outside the walls of the cup they will be folded inside thereof, as hereinbefore explained with reference to Fig. 8. Where the sputum-cup illustrated in Fig. 6 is carried in the pocket, should it by accident be crushed this will not be material, as the walls of the cup have no seams, and therefore the possibility of leakage is prevented.

It is desirable in many instances that the cup be provided with a cover, and where this is desired the cover 10 may consist of waterproof paper of a blank similar to that of which the cup itself is made, except differently proportioned, but folded in the same manner and having the same manner of reinforce-flange, as clearly shown in Fig. 8 of the drawings.

When the cup is used in connection with a holder or container, as in Figs. 4 and 5 and 9 of the drawings, the overhanging exterior reinforce-flange, hereinbefore referred to, in addition to the useful purposes described serves also as a convenient grasp by which the attendant may with cleanliness remove the cup from the holder or container.

The cup may be arranged to be accurately collapsed upon itself, as shown in Fig. 10, for convenience of use—as in a garment-pocket, for instance—or for convenience in packing, carrying, or shipping. When this is found desirable, additional creased lines x y z may be provided in the blank, as shown in Fig. 1, to indicate and facilitate the fold-line for collapsing the cup.

For sanitary reasons and for reasons of health and to prevent contagion sputum-cups should be destroyed after once being used by being burned in a furnace or otherwise, and since a large number of these cups are demanded, as they should be used for a day only, it is of the utmost consideration that they be of economical construction. The cups must, furthermore, be leak-proof or waterproof and have sufficient stability to maintain their form. For sanitary reasons there should also be no obstruction of the opening into the cup, and this openness is also of value, in that it exposes the contents of the cup to the ready inspection of a physician, as well as allows easy entrance of the sputum. All of these essential and desirable features are present in cups constructed according to our invention.

The blanks shown and provided with the described creases to direct and indicate the manner of folding may be nested together for convenience and economy of space in shipment or storage, or they may be collapsed, as shown in Fig. 10, for this purpose, or the blanks may be manufactured and shipped in the flat to hospitals or other places of use and there conveniently folded into the completed article.

The use of the device is of course not confined to consumptives, as it can be used in other cases — as, for example, in cases of severe catarrh, bronchial troubles, and the like. Neither is the use of the invention confined to hospitals or sick-rooms, as such articles can be used in offices, sleeping-cars, aboard ship, and other places.

Having thus fully described our invention, what we claim is—

1. As a new article of manufacture, a sputum-cup constructed of waterproof paper or the like folded into shape and provided at its upper edge with a flange, the ends of which are interlocked for the purpose of maintaining the form of the cup, and locking-tongues folded about the interlocked ends of said flange, substantially as described.

2. As a new article of manufacture, a sputum-cup consisting of a holder, and a waterproof paper or like receptacle, folded into shape and provided at its upper edge with a flange, the ends of which are interlocked for the purpose of maintaining the form of the cup, locking-tongues folded about the interlocked ends of said flange, the said receptacle being arranged within said holder with the upper edge of said holder arranged in the pocket formed by the flange of said receptacle.

3. As a new article of manufacture, a sputum-cup constructed of waterproof paper or the like folded into shape, provided with a flange extending around its upper edge, said flange having flaps the ends of which are folded upon themselves and interlocked, a slit in one

flap being provided for the interlocking engagement of the other flap, substantially as described.

4. As a new article of manufacture, a sputum-cup consisting of a holder, and a receptacle constructed of waterproof paper or the like folded into shape and provided with a flange extending around its upper edge, said flange having flaps the ends of which are folded upon themselves and interlocked, a slit in one flap being provided for the interlocking engagement of the other flap, said receptacle arranged in said holder with the upper edge of the latter disposed in the pocket formed by the flange of said receptacle.

5. A blank for a sputum-cup having bottom and side portions, diametrically opposite extensions adapted to be folded to form a flange extending about the upper edge of the cup and the ends of which are adapted to be interlocked with each other, and provided also with diametrically opposite extensions constituting locking-tongues adapted to be folded about and tucked under the interlocked edges of the flange, substantially as described.

6. A blank for a sputum-cup having bottom and side portions, diametrically opposite extensions adapted to be folded to form a flange extending about the upper edge of the cup and the ends of which are adapted to be interlocked with each other, said blank and the flange portion thereof being provided with slits to permit one end of said flange to be passed under and interlocked with the other end, said blank provided with diametrically opposite extensions constituting locking-tongues adapted to be folded about and tucked under the interlocked ends of the flange, substantially as described.

In testimony whereof we have hereunto set our hands in the presence of two subscribing witnesses.

CHRISTIAN WM. MEINECKE.
DANIEL HOGAN.

Witnesses:
W. C. HAUFF,
CHAS. E. POENSGEN.