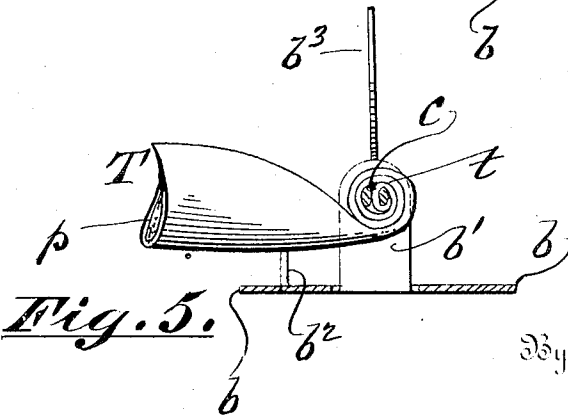
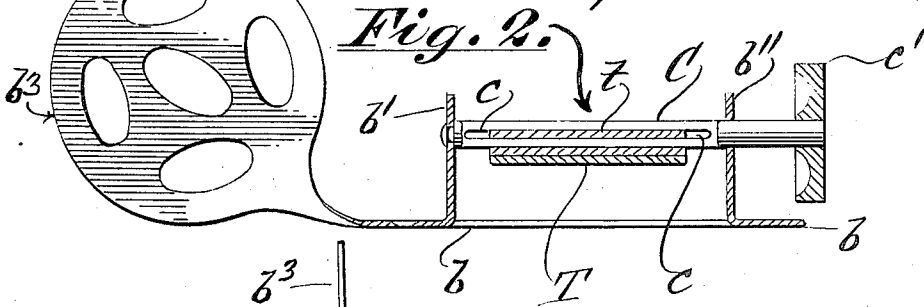
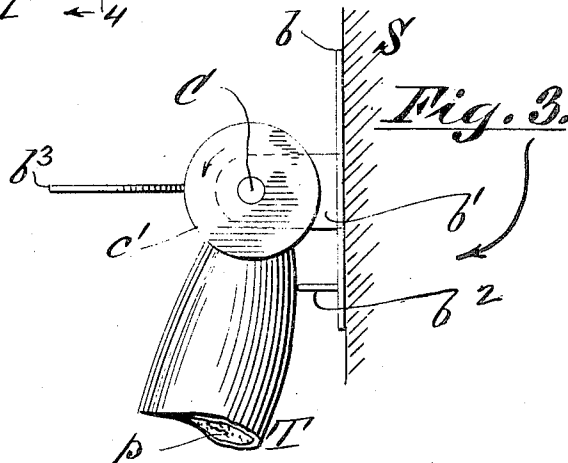
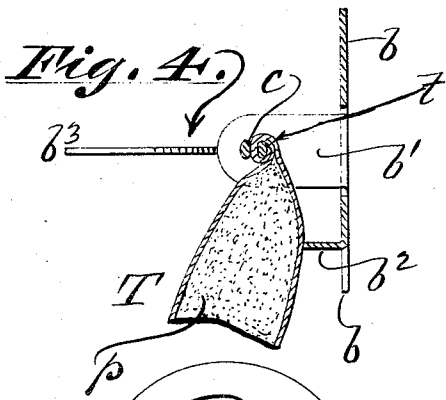
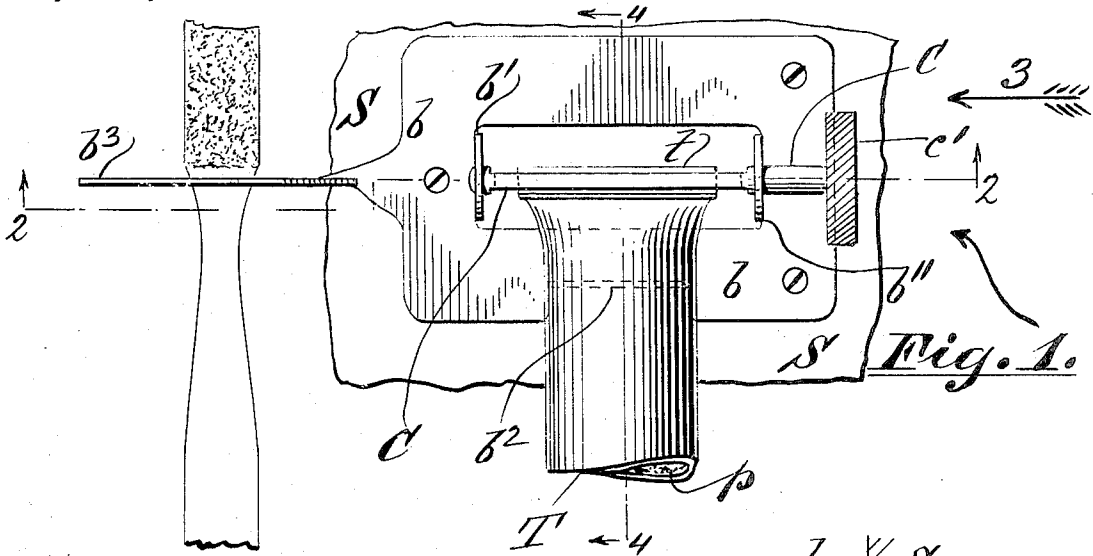


M. MAER.
 MEANS FOR MANIPULATING COLLAPSIBLE TUBULAR CONTAINERS.
 APPLICATION FILED MAR. 31, 1921.

1,417,271.

Patented May 23, 1922.



Inventor:
Morris Maer,
 By his Attorney, Geo. W. Math

UNITED STATES PATENT OFFICE.

MORRIS MAER, OF BROOKLYN, NEW YORK.

MEANS FOR MANIPULATING COLLAPSIBLE TUBULAR CONTAINERS.

1,417,271.

Specification of Letters Patent. Patented May 23, 1922.

Application filed March 31, 1921. Serial No. 457,308.

To all whom it may concern:

Be it known that I, MORRIS MAER, a citizen of the United States, and a resident of the borough of Brooklyn, county of Kings, city and State of New York, have invented certain new and useful Improvements in Means for Manipulating Collapsible Tubular Containers, of which the following is a specification.

My invention is designed to afford a simple, inexpensive but effective device by means of which a collapsible tube, so called, can be adequately held, and compressed longitudinally in part as required, for the purpose of discharging the contents thereof for immediate use,—as for instance the flexible tubular containers in which such commodities as tooth paste, shaving paste, and analogous plastic or semi-fluid substances are packed for commercial purposes, and for individual need and convenience, substantially as set forth in my concurrent application, Serial No. 450,621, filed March 8, 1921, in which I show and describe the use of compression rollers for this purpose.

In the present case I accomplish substantially the same result by the substitution of a slotted rotatable spindle in lieu of compression rollers, the flattened end of the tubular container being inserted in the longitudinal slot in said rotatable spindle, and the latter being turned as required to wind up and compress the tube in part and force out the requisite amount of the contents thereof as required for immediate use.

To this end, my invention consists in the specific construction and arrangement herein described and claimed,—a distinctive feature being the use of a slotted manually rotatable spindle of the character designated, mounted between suitable bearing flanges on a base adapted for rigid attachment to a support, together with other incidental features of construction hereinafter set forth.

In the accompanying drawings,

Fig. 1, is a front elevation of my improved tube compressor showing a collapsible tube connected therewith;

Fig. 2, is a sectional elevation taken upon plane of line 2—2, Fig. 1;

Fig. 3, is an end view of the device, looking in the direction of the arrow 3, Fig. 1;

Fig. 4, is a section taken on plane of line 4—4, Fig. 1;

Fig. 5, is a view similar to Fig. 4, showing the end of the flexible tube wound around the compressor spindle.

S, represents a support of any kind to which the base plate *b*, of my device is screwed or otherwise rigidly attached, as indicated particularly in Figs. 1 and 3, of the drawings.

The base *b*, is preferably made of sheet metal of suitable thickness, with the bearing flanges *b'*, *b''*, tube rest *b²*, and brush bracket *b³*, made integral therewith, the whole frame work consisting of a single piece of such sheet metal stamped out and bent into shape as required. That is to say, the base *b*, bearing flanges *b'*, *b''*, tube rest *b²*, and the brush bracket *b³*, may be formed of, and from a single stamped blank suitably bent into shape, for simplicity and economy of structure, although I do not limit myself in this respect, since it is obvious a casting might be substituted embodying these elements, or an integral frame work of substantially the same configuration might be otherwise built up to afford the requisite supporting elements.

The compressor wind-spindle C, is rotatably mounted on and between the bearing flanges *b'*, *b''*, the medial portion of said spindle C, positioned between said bearing flanges, being formed with the longitudinal slot *c*, extending therethrough for the reception and insertion transversely of the usual flattened end *t*, of a collapsible tube T, containing a plastic or semi-fluid paste *p*, for dental purposes; or the paste *p*, may consist of a shaving soap, or analogous composition for individual use, to be retained in the tube until immediately required, and then to be ejected in suitable quantity by the rotation of the compression spindle C.

In order to facilitate the manipulation of the compressor wind-spindle C, in such manner that the flexible container T, may be wound thereupon as and for the purpose stated the protuberant end of said wind-spindle C, beyond the bearing flange *b''*, is provided with a finger piece *c'*, preferably in the form of a peripherally knurled knob or disc for frictional contact with the fingers of the user of the device.

The tube rest *b²*, positioned and extending in parallelism with the longitudinal axis of the compressor wind-spindle C, acts as a guide and support for the main or uncol-

110

lapsed portion of the container T, not only protecting the latter against undue or unnecessary torsional strain, but also insuring the proper longitudinal alignment of said tube T, as related to said compressor spindle C, so that the feed of the tube thereto is at right angles to the said longitudinal axis of the wind-spindle C, thereby obviating distortion and possible rupture of the comparatively delicate container T, and insuring even ejection of the plastic material from the uncapped discharge end thereof.

While I herein exemplify the embodiment of the essential features of my invention in practical form I do not limit myself to minor details of construction, which may obviously be varied and modified within certain limits without departing from the spirit and intent of my invention in this respect,—the fundamental idea in this case being the substitution of the longitudinally slotted compression-wind spindle C, in lieu of the compression rollers shown and described in my aforesaid concurrent application Serial No. 450,621, upon which the

present invention is primarily an improvement designed to effect greater simplicity and economy of manufacture, as well as to attain an equally effective device for a like purpose,—the operation in either case, in so far as the successful manipulation of the flexible container T, for the purpose designated is concerned, being substantially the same.

What I claim as my invention and desire to secure by Letters Patent is,

As an improved article of manufacture, a tube holder and compressor, embodying a single integral element comprising a body portion, flanges struck-up from said body portion within the confines thereof, and a tube rest struck-up from within the confines of said body portion and having its edge adapted to engage a tube, and a spindle supported in said flanges, said tube rest being disposed at right angles to the plane of the body portion.

MORRIS MAER.

Witnesses:

EDW. E. ROSENBLUME,
HAROLD L. ROSENBLUME.