

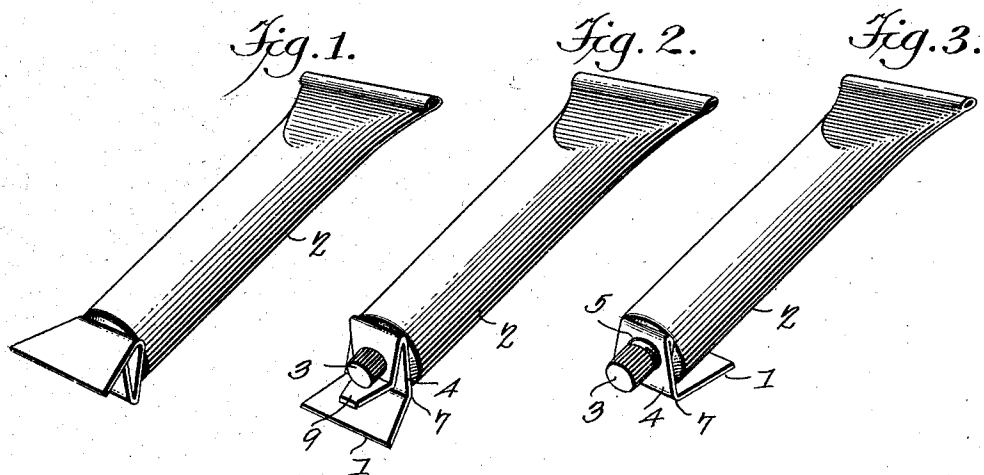
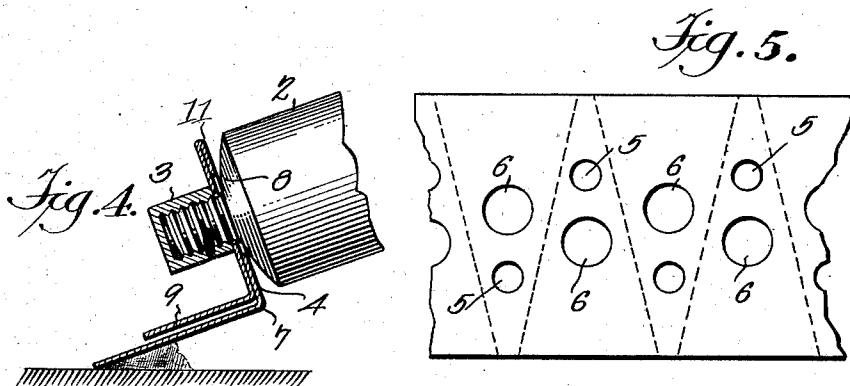
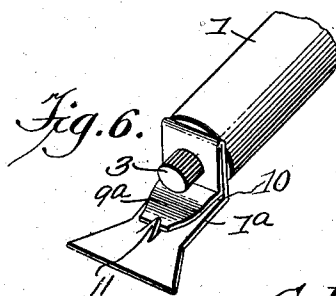
No. 749,486.

PATENTED JAN. 12, 1904.

C. L. HUDDLE.
COMBINED COLLAPSIBLE TUBE AND SPREADER.

APPLICATION FILED APR. 11, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

CLINTON L. HUDDLE, OF NORTH BALTIMORE, OHIO.

COMBINED COLLAPSIBLE TUBE AND SPREADER.

SPECIFICATION forming part of Letters Patent No. 749,486, dated January 12, 1904.

Application filed April 11, 1903. Serial No. 152,183. (No model.)

To all whom it may concern:

Be it known that I, CLINTON L. HUDDLE, a citizen of the United States, residing at North Baltimore, in the county of Wood and State of Ohio, have invented a new and useful Combined Collapsible Tube and Spreader, of which the following is a specification.

This invention relates to spreaders used for applying semiliquid material to surfaces to be coated; and the object is to provide a device which will evenly spread the material with a reservoir-handle from which the material can be supplied as it is distributed by the spreader.

A further object is to provide a reversible spreader which can be readily applied to and removed from its handle.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims, it being understood that various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

In the drawings, Figure 1 is a perspective view of a spreader applied to a tube and in the position assumed when the contents are being removed from the tube. Fig. 2 is a perspective view of the spreader ready for use. Fig. 3 is a perspective view showing the reversed position of the spreader. Fig. 4 is a fragmentary view in elevation of the handle, the spreader being shown in section. Fig. 5 is a plan view of the blank for the spreader, and Fig. 6 is a slightly-modified form of spreader.

In the preferred embodiment of my invention the reference numeral 1 designates the spreader-blade, which is detachably and reversibly secured to the handle 2 by a fastening device 3, engaging the end of the handle, which projects through the yielding and deflected end 4 of the blade.

In actual practice the spreader will be formed of a single blank of sheet metal struck out by a suitable die.

The blank used in the preferred form of spreader consists of an approximately triangular piece of metal provided with openings 5 and 6. The blank is bent or deflected at an

angle to the spreading portion of the blade, as at 7, and then bent back upon itself to align the openings 5 and 6, which receive the engaging end of the handle 2, on which the fastening device 3 is fitted to force the spreader against the shoulder 8. The portion of the spreader which is bent back upon the deflected end 4 constitutes a tension device to hold the blade in proper position, so that when pressure is applied upon the blade a slight yielding influence will be imparted thereto, which will be limited by the terminal finger 9, forming a stop for the blade.

In order that the yielding influence will be effective, one of the openings 5 and 6 is larger than the other to permit of a movement of the blade, while the other opening is of substantially the same diameter as the reduced end of the handle on which it fits, and by adjusting the fastening device 3 the tension of the yielding connection can be governed. When the fastening device 3 is loose on the discharge end of the tube 2, the blade will swing from the bend 11, permitting considerable play; but when the nut is caused to bind against the blade-supporting portion the movement will be from a point adjacent to the bend 7, thus temporarily retarding the flexibility of the blade.

In the modified form illustrated in Fig. 6 the blade 1^a is connected to the flexible member by a reduced intermediate portion 10, which imparts the necessary flexibility thereto. The limit of movement of the blade is governed by the stop 9^a, which engages with the upstruck spur 11 thereon. The reservoir-handle 2 can consist of an ordinary collapsible tube adapted to contain pastes or semiliquids, although other forms of handles may be employed, if desired.

In order to minimize space in packing, the spreader will be reversed upon its handle, so that the blade will be snugly against the side of the handle. In supplying the material from the tube the blade 1 is turned so as to be out of contact with the surface, and when a sufficient quantity is removed the cap is screwed on and the spreader is used to equally distribute the material over the surface to be coated.

What I claim is—

1. A spreader-blade having a yielding supporting means and means for regulating the yielding supporting means.
- 5 2. A spreader comprising a handle, and a reversible blade carried by the handle.
3. A spreader comprising a handle and a yielding reversibly-supported blade carried by the handle.
- 10 4. A spreader comprising a reservoir-handle, and a flexed blade carried by the handle and having a stop-finger.
5. A spreader comprising a handle, a blade, a yielding connection for the handle and blade
- 15 and a tension device on the handle.
6. A spreader comprising a blade having alining openings, a handle extending through the openings and a fastening device engaging the handle.
- 20 7. A spreader-blade having a deflected end

bent back upon itself with a finger to bear upon the blade.

8. A spreader-blade having a deflected end bent back upon itself with a terminal finger to limit the movement of said blade.

9. A spreader-blade with an end bent back upon itself and having alining openings for the insertion of a handle and a terminal finger bearing upon the blade.

10. A spreader-blade having a yielding securing end bent back upon itself with alining openings.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CLINTON L. HUDDLE.

Witnesses:

ARTHUR S. SIMON,
W. W. NIGH.