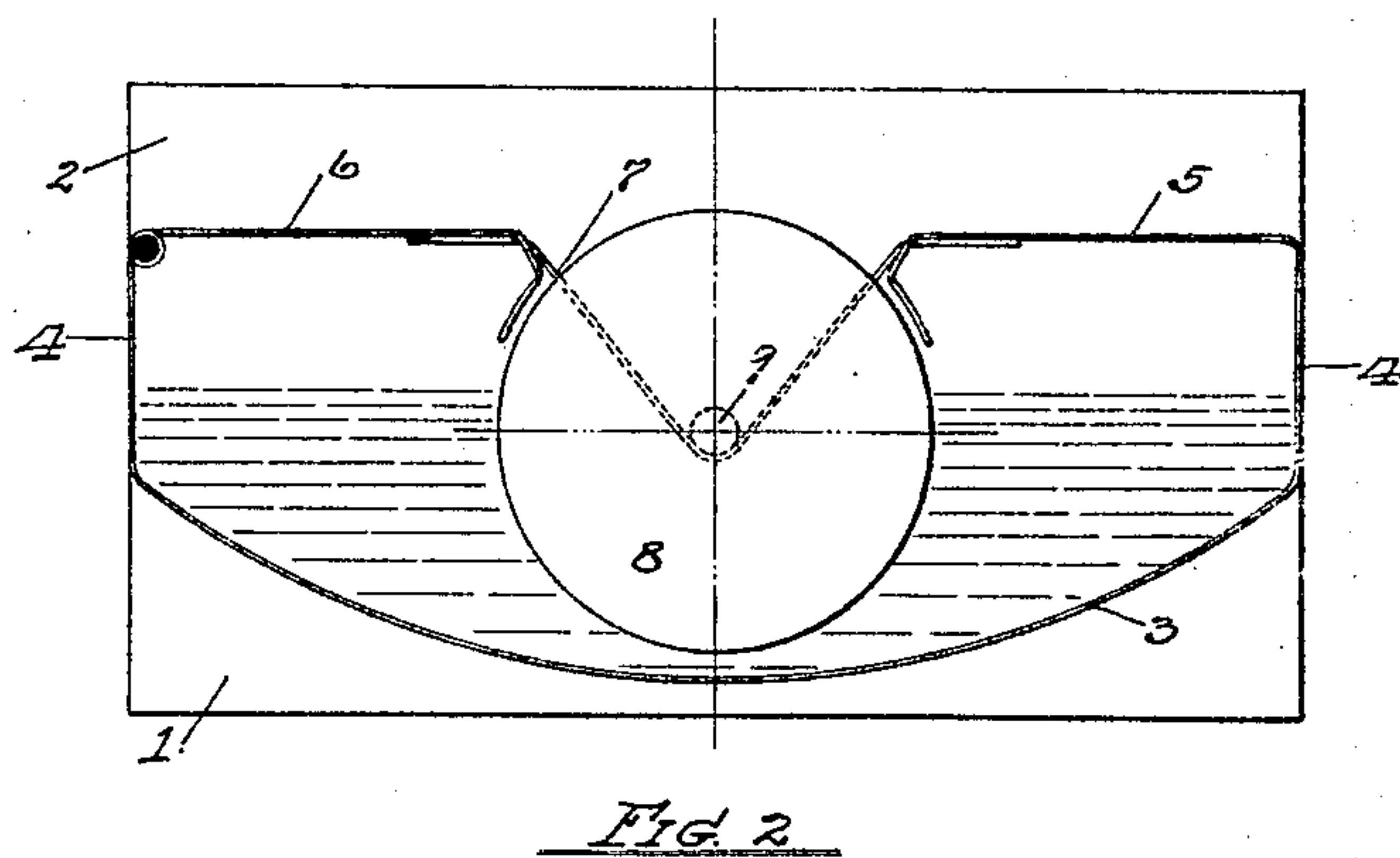
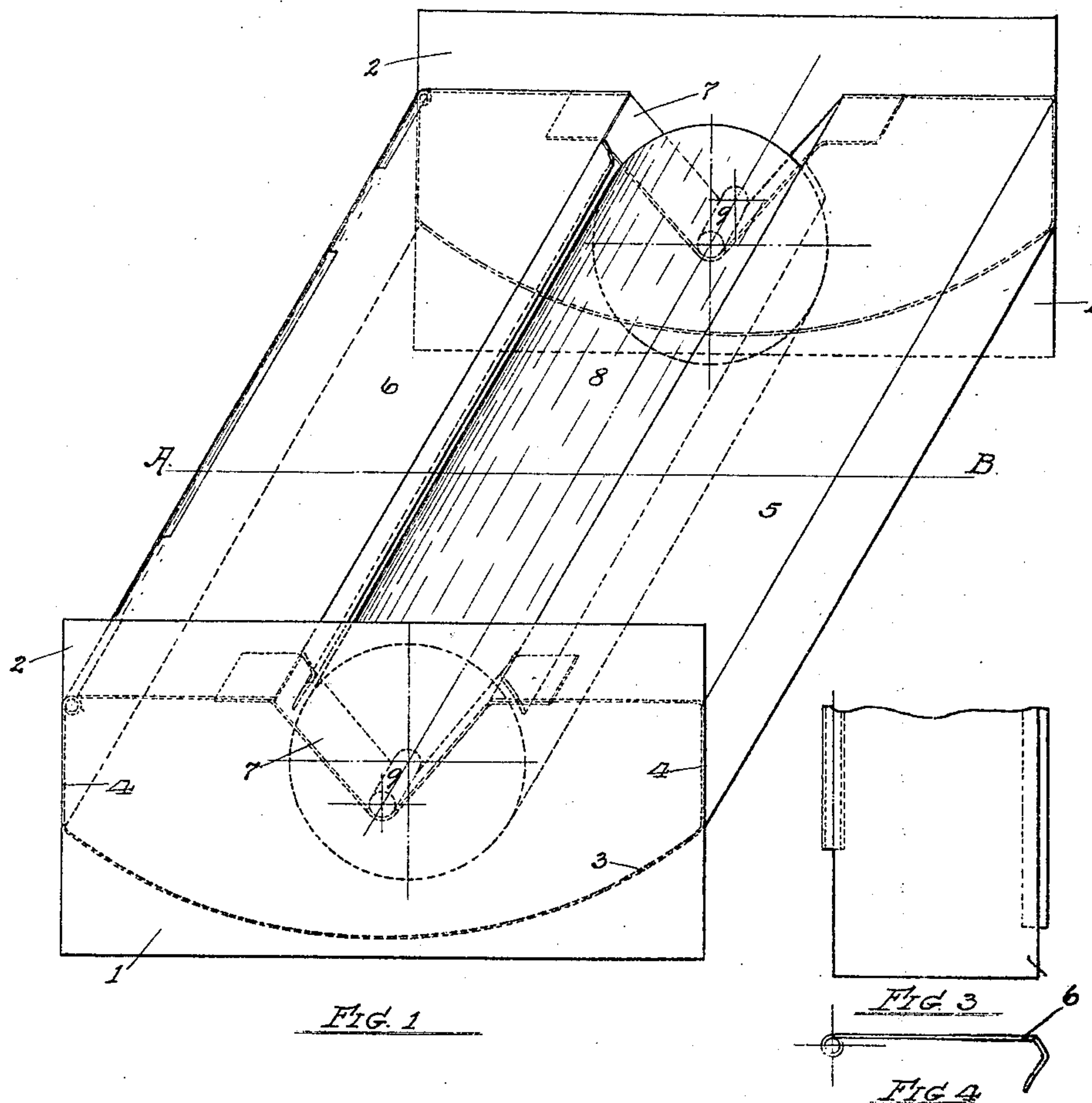


No. 764,796.

PATENTED JULY 12, 1904.

L. W. DAVIS.  
LIQUID APPLYING APPARATUS.  
APPLICATION FILED JULY 3, 1903.

NO MODEL.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

LEVI WALTER DAVIS, OF PHILADELPHIA, PENNSYLVANIA.

## LIQUID-APPLYING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 764,796, dated July 12, 1904.

Application filed July 3, 1903. Serial No. 164,234. (No model.)

*To all whom it may concern:*

Be it known that I, LEVI WALTER DAVIS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Liquid-Ap-  
5 plying Apparatus, of which the following is a specification.

My invention relates particularly to im-  
10 provements in that class of devices known as gummers, paste-appliers, mucilage-distrib-  
tters, and the like; and its object is to provide a convenient and economical device of the  
class described suitable in its scope, which  
15 ranges from a small label to a length of wall-  
paper.

Another object in view is to evenly coat  
the entire surface of the applied material with-  
out waste of the liquid, also for the rapid  
20 manipulation of material, the cleanly manner  
of the said application, as well as the conven-  
ience thereof, and to provide a reservoir  
which is susceptible of ready transportation.  
The reservoir is adapted to be readily cleansed,  
25 while at the same time it is so arranged as to  
practically prevent evaporation of its con-  
tents.

I attain these objects by simple devices  
hereinafter fully described, and shown in the  
30 accompanying drawings, in which—

Figure 1 is a perspective view of the appa-  
ratus; Fig. 2, a section on line *a b* of Fig. 1,  
showing the interior arrangement; Fig. 3,  
the plan of a fragment of the hinged cover,  
35 and Fig. 4 the end elevation of the same.

In the drawings, 1 1 represent the rectan-  
gular ends of a thin metallic case, the lower  
edges of which rest upon the table, bench, or  
floor upon which the apparatus is placed.  
40 The upper edges 2 2 extend above the level  
of the top surface, forming guiding-flanges for  
the strips of material passed over the roller in  
the process of receiving a coat of the liquid.  
The bottom of the case 3 is preferably made  
45 cylindrically concave, so that the liquid con-  
tained therein shall be deepest in the center,  
and that form obviously permits use to be made  
of the liquid so long as any shall remain within  
the case. The sides 4 4 and half-top 5, together  
50 with the bottom 3, are preferably made of one

piece without joint, formed into the proper  
shape and united to the ends 1 1 by solder. The  
other top, 6, is made separate and united to the  
side 4 by a hinge-joint extending its entire  
length. The inner edges of both top pieces are 55  
bent downwardly in conformity with the  
radius of the roll 8 and are arranged to  
barely clear its periphery when the said roll  
is resting in its bearings 7 7, which are V-  
shaped, open at the top, and of sufficient angle 60  
to allow the roll to be withdrawn. The bear-  
ings 7 7 have outwardly-extending arms se-  
cured to the ends 1 1 and also half-top 5. The  
hinged top 6 normally rests on the opposite  
arm, but is readily removable therefrom. 65  
The roll is a hollow cylinder having project-  
ing pintles 9 9 at both ends adapted to rest  
and revolve in the open bearings 7 7. It is  
desirable that the roll 8 be made light enough  
to float in the liquid contained in the reser- 70  
voir, as by so doing it will rise in its open  
bearings, fill the opening at the top between  
the covers, and hence prevent evaporation of  
the liquid in the reservoir. The thin film of  
liquid which may be upon the surface of the 75  
roll after use materially aids in forming an  
air-tight joint in the manner of a packing.

In operation the cover is turned back, the  
reservoir formed in the case filled with the  
liquid to be applied, the cover replaced, and 80  
as the periphery of the roll is always slightly  
above the otherwise smooth surface of the top  
the friction of the article moved over the top  
causes it to revolve and deposit an even film  
of the fluid, in which the roll is semisurrounded 85  
on the lower surface of the article. So long  
as any liquid remains in the reservoir this  
action will be continued. It is not necessary  
to remove the remainder of the liquid after  
use, as the case, in combination with the roll, 90  
forms a sealed receptacle for its maintenance;  
but if for any reason it becomes desirable to  
change the contents or cleanse the reservoir  
it is readily accomplished by turning up the  
top and withdrawing the roll. 95

While this apparatus is specially designed  
for gumming labels, applying liquid paste to  
wall-paper, blanks, and like uses, it is evi-  
dent that it may be used with equal readiness  
in applying any liquid or semiliquid prepa- 100



rations—as ink, paint, oil, &c.—to any flat surfaces which may be brought into contact with the delivering-roll.

I do not wish to confine myself strictly to the form of the device as shown, but may make minor modifications, such as using two hinged covers in place of one and the whole apparatus of such proportions and material as may seem best, all, however, without departing from the general spirit of the invention.

Now, having described my invention, what I claim, and desire to secure by Letters Patent, is—

15 1. In a liquid-applying apparatus, a buoyant roll, situated partially within a reservoir and adapted to be revolved by the superficial contact of material passed over its exposed periphery, of continuous flanges, depending  
20 from each side of the opening in the cover of the said reservoir, forming in connection with the longitudinal side walls of the said roll, a normally non-evaporative chamber below, all substantially as shown and described.

25 2. In a liquid-applying apparatus, the combination of a case containing a reservoir provided with a hinged cover or covers having a longitudinal central opening, of a distribut-

ing-roll loosely journaled within said case; of downwardly-extending flanges, integral with  
30 the covers, contiguous to and on each side of the said roll and of upwardly-projecting end walls forming guides, all substantially as and for the purposes set forth.

3. In a liquid-applying apparatus, the combination of a self-sealing reservoir, of a hinged  
35 cover or covers, of a distributing-roll, and of guide-walls above the roll-surface.

4. A liquid-applying apparatus comprising a case, a cover in two parts, either or both  
40 hinged to the side walls, journal-hangers attached permanently at each end and inside the case, a floating cylindrical roll, provided with pintles at each end and adapted to rest and re-  
45 volve in said hangers when depressed, and having a portion of its periphery slightly above the surface of the covers, and guide-walls at each end of the apparatus, all substantially as and for the purposes as set  
50 forth.

In testimony whereof I affix my signature in presence of two witnesses.

LEVI WALTER DAVIS.

Witnesses:

R. E. SHELLERS,  
W. FRANK VAUGHN.