

No. 766,083.

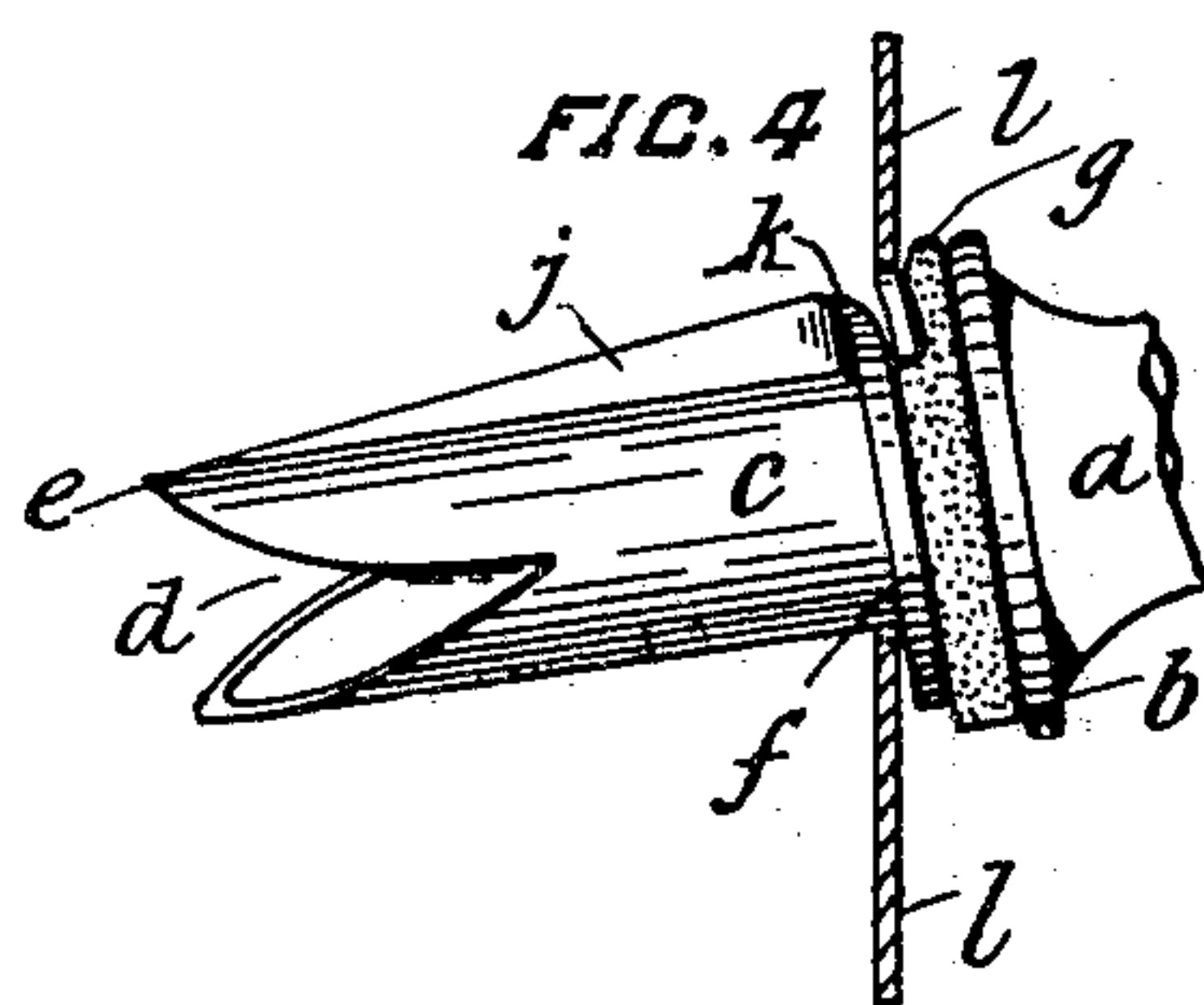
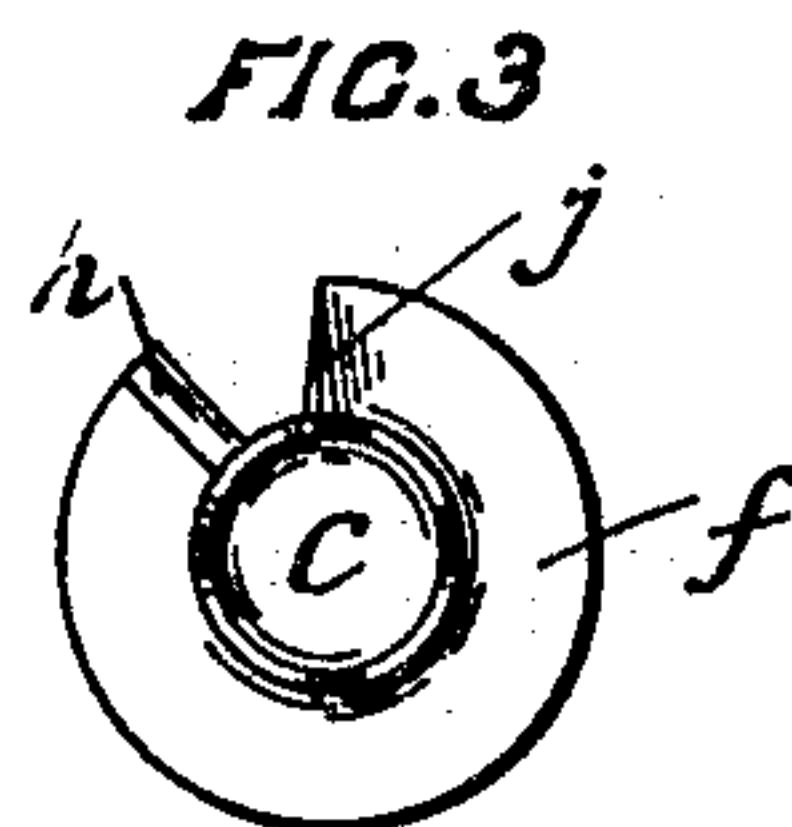
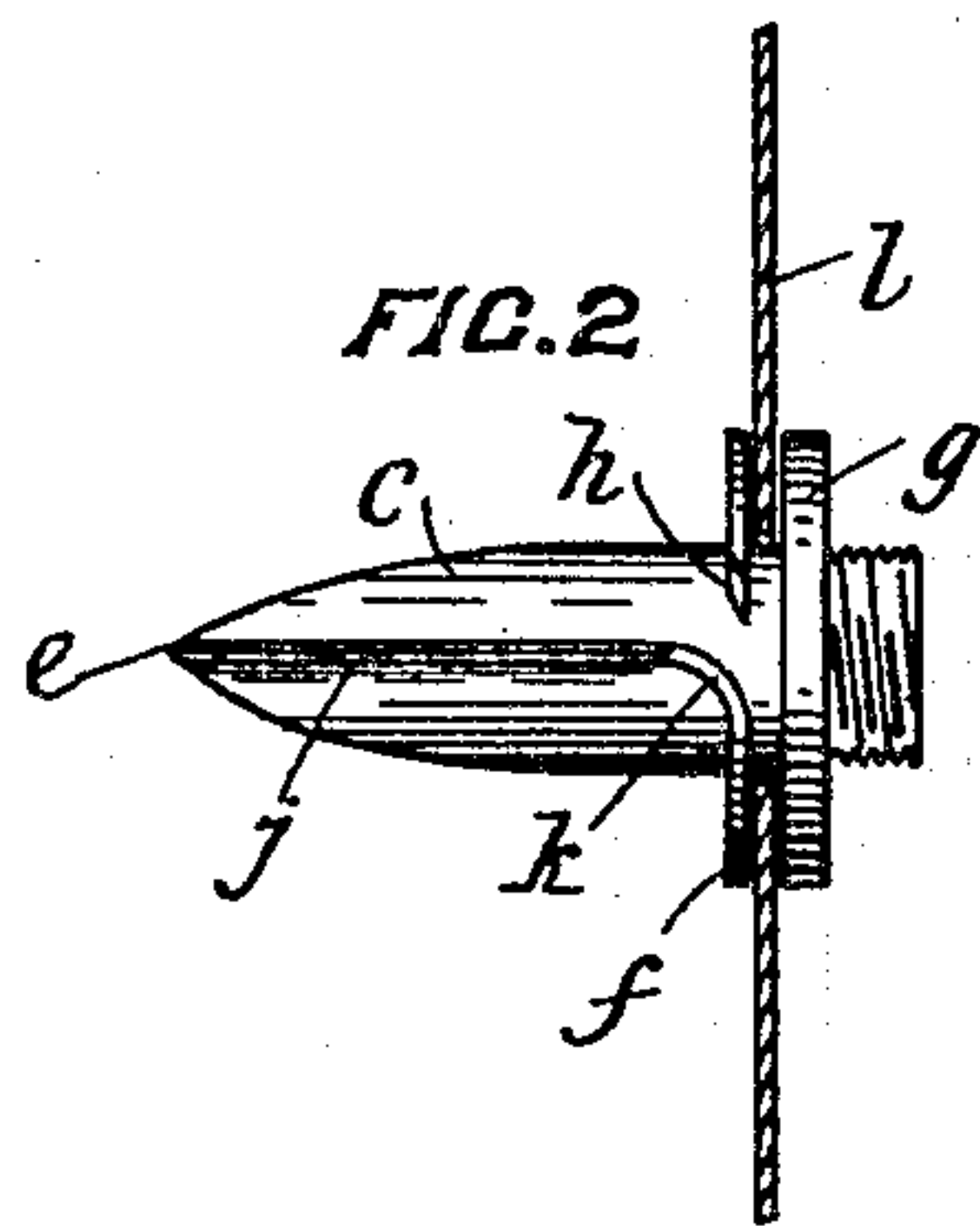
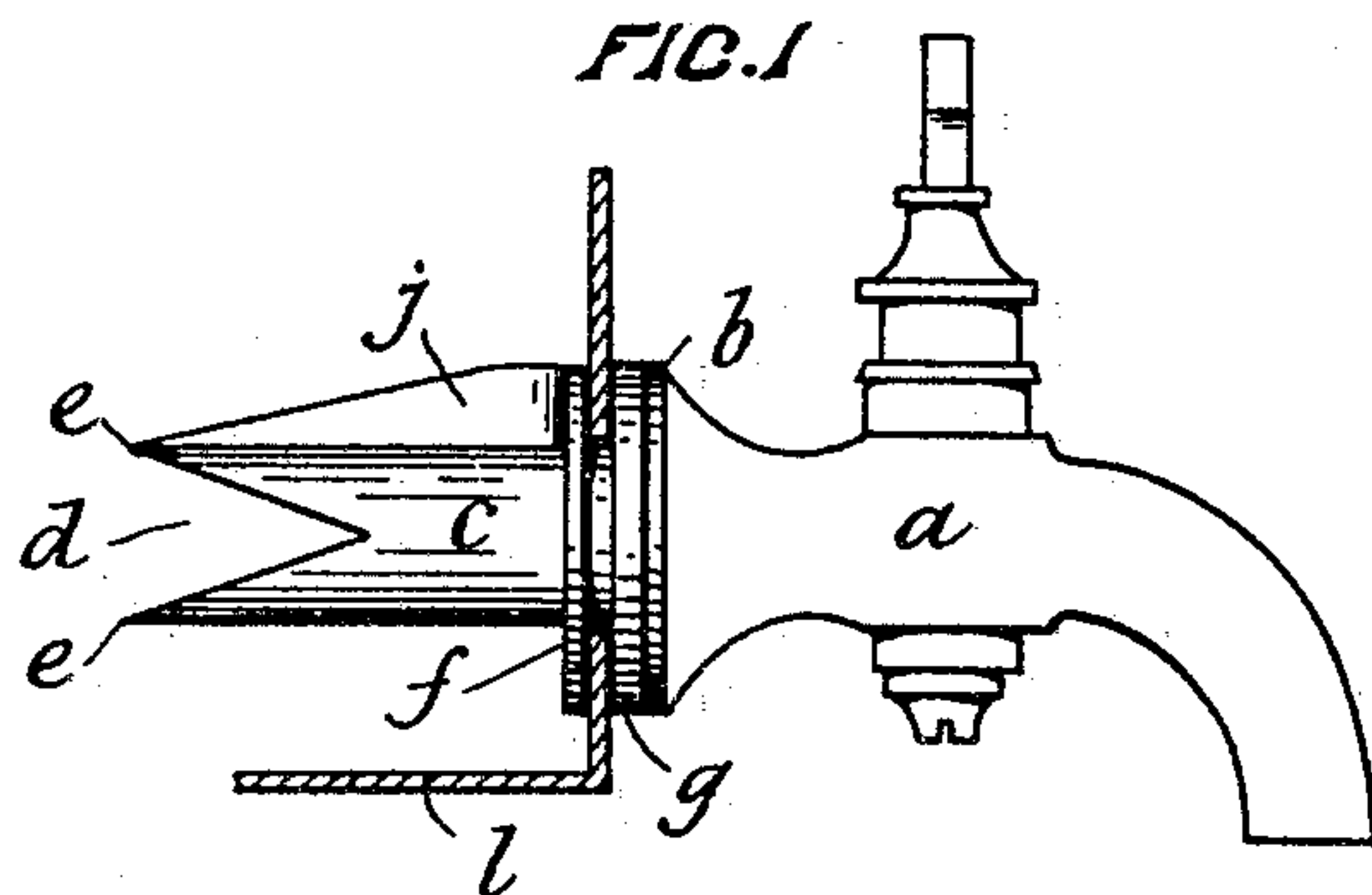
PATENTED JULY 26, 1904.

A. M. S. WATTS.

MEANS FOR ATTACHING DRAW-OFF TAPS TO DRUMS, &c.

APPLICATION FILED JUNE 26, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

ALFRED MONSELL SPRAINGER WATTS, OF PALMERSTON NORTH, NEW ZEALAND.

MEANS FOR ATTACHING DRAW-OFF TAPS TO DRUMS, &c.

SPECIFICATION forming part of Letters Patent No. 766,083, dated July 26, 1904.

Application filed June 25, 1903. Serial No. 163,117. (No model.)

To all whom it may concern:

Be it known that I, ALFRED MONSELL SPRAINGER WATTS, a subject of the King of Great Britain, residing at Palmerston North, in the Colony of New Zealand, have invented a new and useful Means for Attaching Draw-Off Taps to Drums and the Like; and I do hereby declare the following to be a full, clear, and exact description of the same.

This invention has been designed for the purpose of providing means whereby draw-off taps may be readily and efficiently attached to kerosene-tins or to similar thin-metal drums or receptacles containing liquids that are required to be drawn off for use in proportionately small quantities at a time.

The means devised consist of a special form of barrel that is attached to the tap and which is adapted to pierce a round hole in the side of the receptacle through which it may enter. The barrel is formed with a flange near one end and with a longitudinal radial knife-edged projection upon its outer periphery, so shaped that when the barrel has been pressed into the receptacle and is given a turn the flange will be caused to enter and surround the inner edge of the hole cut in the side. A washer is placed between this flange and a flange formed on the tap, so that when the barrel-flange has entered beneath the side of the receptacle this washer will press against the outer edge of the hole and cause a tight joint to be made.

In order that the invention may be thoroughly understood, reference will be made to the accompanying sheet of drawings, in which—

Figure 1 is a side elevation of a tap with the special form of barrel attachment in position upon a tin. Fig. 2 is a plan of the barrel attachment. Fig. 3 is a back end elevation of the same. Fig. 4 is a side elevation of the barrel attachment, on an enlarged scale, showing the manner in which its flange is turned into the tin.

a is the tap, which may be of any ordinary type, but which is formed with a flange *b* upon its end.

c is the tap-barrel, which is preferably formed of a separate piece to the tap and is secured thereto by being screwed into its flanged end. The inner end of the barrel has a V-shaped groove *d* cut diametrically inward from its end, so as to form two sharp rounded points *e e* at the end.

A circular flange-plate *f* is secured upon the barrel *c* near the tap-flange *b*, a short space being left between the two flanges in which is inserted a rubber or other resilient washer *g*. The flange *f* is broken away for a short distance in its circumference, and one edge *h* is formed with the inner face of the flange tapering inward, so as to form a sharp edge upon the outer face of the flange.

Secured longitudinally and radially upon the outer periphery of the barrel *c* is a plate *j*, which is formed with a sharp top edge and whose width tapers from nothing at the pointed end of the barrel to the same width as that of the flange *f* at the other end. This plate is joined onto the other broken edge of the flange *f* by means of the curved portion *k*. (Shown more particularly in Fig. 2.)

To attach the tap to the desired receptacle, the pointed ends *e* of the barrel *c* are pressed down upon the side *l*. This pressure will cause such ends to pass through the material of which the receptacle is made, and upon the pressure being continued the barrel will cut a disk out of the side, leaving a hole through which it will enter. At the same time as the hole is thus being cut a slot will be cut radially with the hole by the plate *j*. When the barrel has been pressed right down through the side *l* until its flange *f* rests upon the top side thereof, the tap and barrel are then given a turn while continuing the downward pressure. This will have the effect of causing one edge of the radial slot to turn out over the curved surface *k*, as shown in Fig. 4, so that the edge will be inserted between the washer *g* and the outer face of the flange *f*. On continuing this turning movement the whole of the flange *f* will be turned in beneath the under face of the side *l*, and thus cause the tin around the hole formed in it to be tightly

gripped between the flange f and tap-flange b , the washer g serving to keep the flange f hard up against the under side of the side l . This will insure a good water-tight joint being effected and will allow of the contents of the receptacle being drawn off through the tap a as they are required.

When the receptacle has been emptied of its contents, the tap may be detached by turning it in an opposite direction, when the sharp edge h of the flange will catch beneath one edge of the radial slot in the tin and cause the flange to be deflected to the outside thereof.

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

1. In means for attaching draw-off taps to drums and the like, a tap-barrel formed with pointed tips at one end thereof and with a radial longitudinally-tapering knife upon its outer periphery, and a circular flange-plate upon the barrel, broken away for a short distance in its circumference to one edge of which

the radial knife is attached by means of a curved portion, as herein specified.

2. A tap formed with a flange upon its end, in combination with a barrel one end of which is adapted to be secured to the flanged end of the tap and the other end of which is formed with pointed ends, a flange-plate secured upon the barrel near the flanged end of the tap and extending nearly round the circumference thereof, a sharpened edge upon one end of the flange-plate, and a radial longitudinally-tapering knife upon the outer periphery of the barrel attached to the other end of the flange-plate by means of a curved portion, all as and for the several purposes herein set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ALFRED MONSELL SPRINGER WATTS.

Witnesses:

W. ALEXANDER,
G. WIX.