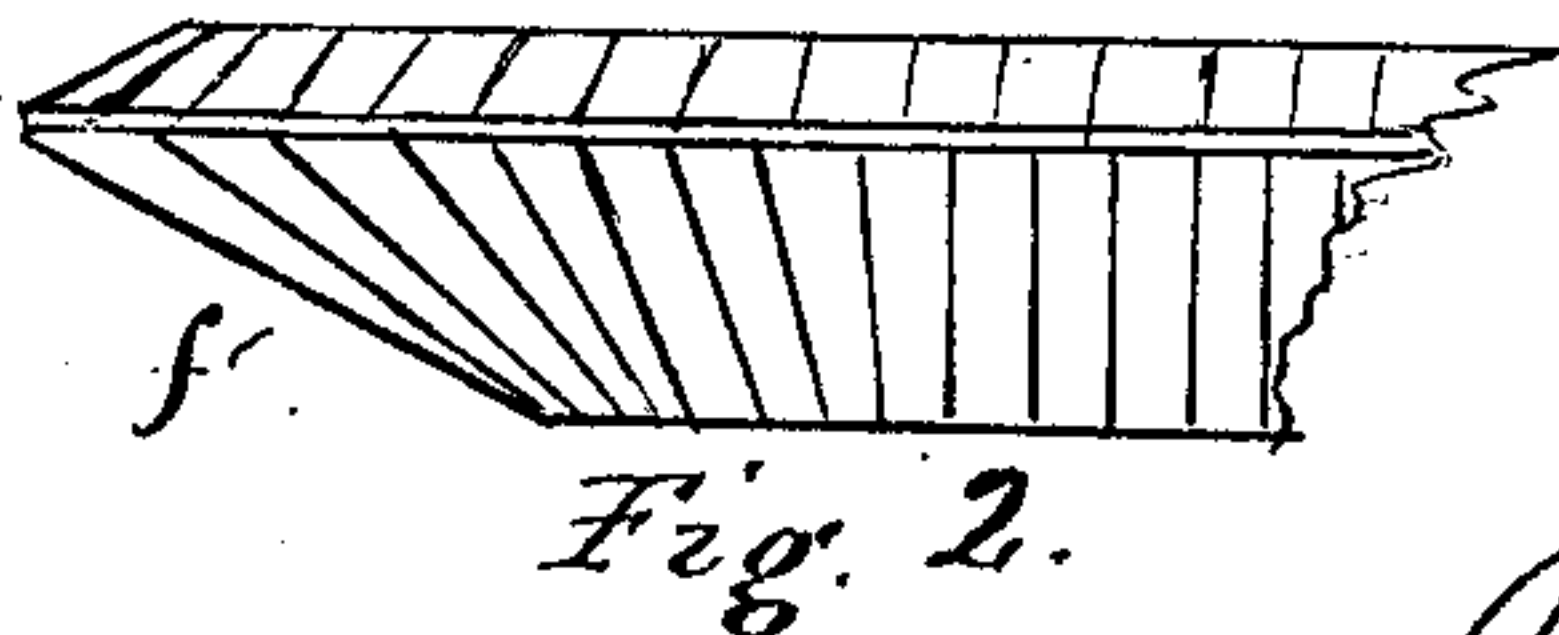
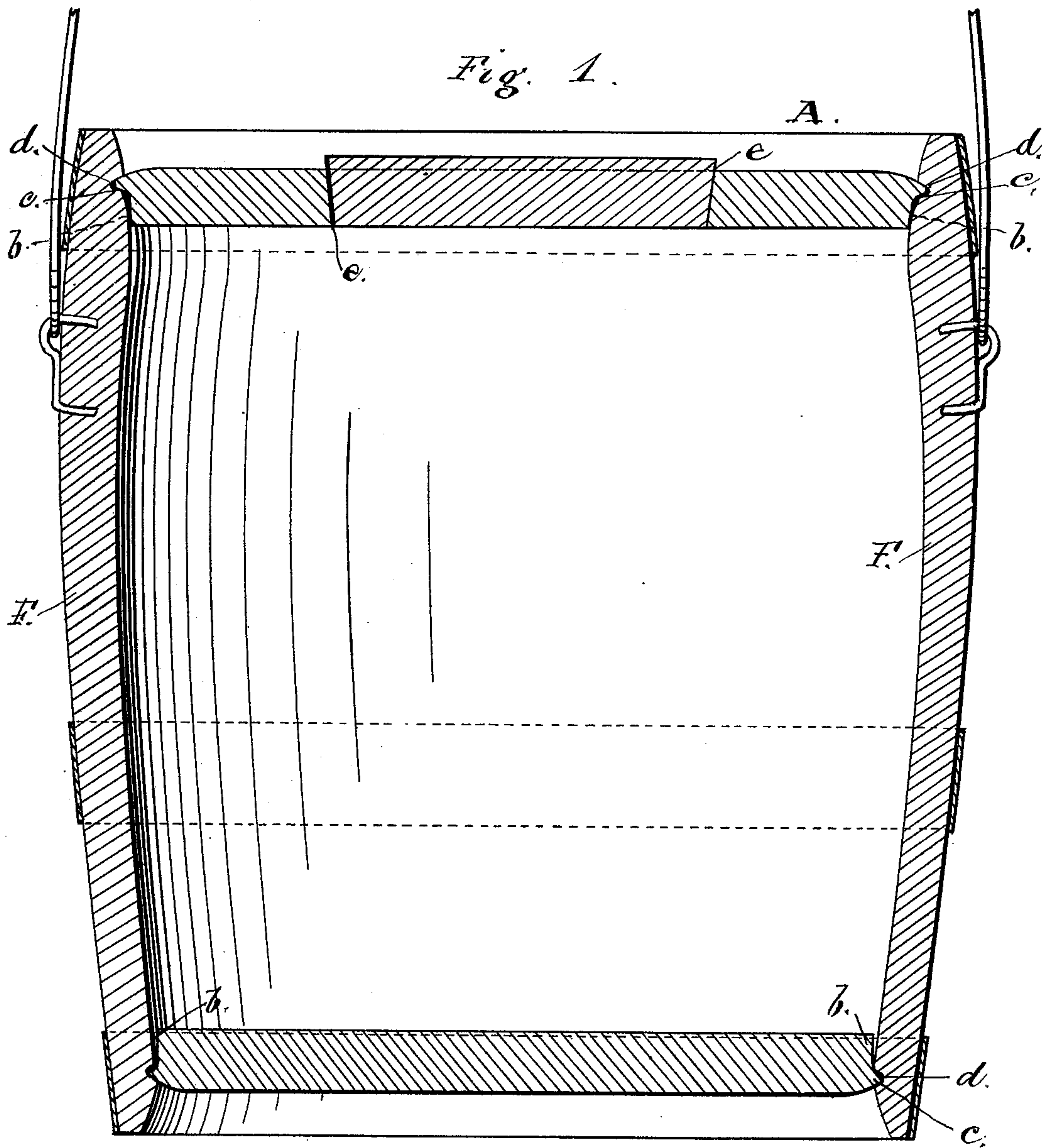


R. B. TURNBULL.  
KEGS FOR WHITE-LEAD, PAINTS, &c.

No. 195,733.

Patented Oct. 2, 1877



Witnesses:  
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# UNITED STATES PATENT OFFICE.

ROBERT B. TURNBULL, OF CLEVELAND, OHIO.

## IMPROVEMENT IN KEGS FOR WHITE LEAD, PAINTS, &c.

Specification forming part of Letters Patent No. **195,733**, dated October 2, 1877; application filed April 16, 1877.

*To all whom it may concern:*

Be it known that I, ROBERT BURNS TURNBULL, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Kegs for Containing White Lead, Paints, &c., and in the heads of kegs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my improvement is so to construct and apply wooden heads to kegs adapted to receive white lead, paints, &c., that there shall be less waste of the lead when filled; that the kegs may not have their hoops disturbed or loosened in order to be filled, or in order to get access to their contents; that the treatment of the inside of the kegs with glue before filling them may be so done that the glue may dry rapidly, instead of requiring many days, as under the present mode of construction; that the glue, when once applied, may not be broken and cracked by removing the head, but remain intact, thus preventing the absorption of the lead into the body of the keg through such cracks, and the consequent deterioration or waste of the lead and oil, as also a waste of the glue; and that there may be very increased economy and convenience to the packers.

The prevalent mode of putting up white lead for market is for the packer or lead-manufacturer to purchase in large quantities kegs having solid removable heads, and, before packing, every keg requires to have a hoop or hoops driven off at one end of the keg and its head removed in order to fill it; and the heads are almost universally made with an edge such as is shown in Fig. 2. These kegs are glued inside before they are filled with lead, and a large quantity of glue collects in the chime or chine, and it takes about a week for this part of the glue to dry, and when subsequently the hoops are driven off and the head removed the glue upon such end is broken and cracked, thereby causing more or less loss of the oil and lead with which the keg is filled. Large manufacturers of lead and paint are obliged to employ

skilled coopers to remove and replace the removable heads, and at considerable expense, and they are also compelled to purchase their kegs all from one manufacturer, because the heads made by different manufacturers must and do differ in size, and when removed from their respective kegs in large quantities at a time these heads, made by the different manufacturers, inevitably get mixed together, and will not fit any of the kegs of other manufacturers. Thus the loss is very great, and much time and patience of the operatives wasted.

To avoid the above-enumerated evils, and others incident to the existing construction, I make the head A with a shoulder, *b*, projecting downward nearly vertically from the edge or double bevel *c*, which enters the grooves *d* on the inner face of the staves near their ends, and also make a large bung-hole, *e*, in one of the heads so made.

Upon applying this head to the end of the staves F the shoulder *b*, it will be seen, will be inside the keg, projecting within beyond the line of the grooves, the periphery of such shoulder abutting snugly against the inner face of the staves, and leaving no crevice there to be filled, such crevice being unavoidable in the ordinary construction, as shown at *f* in Fig. 2. The head also gets a much firmer and stronger purchase, and the keg itself is stronger, because of the support afforded by the shoulder against the staves, and of the staves against the shoulder, over and above the mere joint made by the beveled edge and groove; and as nearly the entire thickness of the head is in contact with the staves, this compound joint is much tighter and a better protection against leakage at the joint than is afforded by any head known to me.

My keg, made as described, may be filled much sooner after it is glued on its inside than is practicable with those having the ordinary heads, because the glue, not being more thickly deposited at some places than at others—as, for instance, in the chine—but, on the contrary, being evenly distributed, it will dry and harden alike and in equal time all over.

When thus quickly dried, and with no waste either of time or glue, they may be easily and quickly filled without any risk of cracking the glue or breaking any joints, as the large bung



in the fixed, permanent head allows the introduction of the white lead or paint into the keg without in the least disturbing or destroying the integrity of the keg or its heads, or any of the joints, and this insures a great saving in lead, oil, and glue.

My keg can also be made cheaper than the old style. The staves may be sawed with the bilge in, and the whole keg may be "set up" and "worked off" by boys, thereby saving a large amount in wages, which, in making the ordinary keg, must be paid for skilled labor of experienced coopers.

This improved head being never removed after being once put to place, all inconveniences incident to removable heads are avoided, including the risk of chipping or breaking the heads or staves, either in removing or replacing.

The kegs may be made in the shape of a bucket, and with a bail or handle, and embody my invention.

My improved heads, with the shoulder, as described, may also be applied, in the same manner as shown, to buckets or kegs made of sheet or other metal, and intended for holding articles other than leads or paints.

After the contents of my improved kegs have been removed the kegs remain in perfect condition to be reused for the same or other purposes.

I claim—

1. The permanent top head described for kegs, buckets, &c., made with the double-beveled edge *c*, the shoulder *b* beneath the same, projecting vertically into the keg, and also with the large bung-hole adapted for filling the keg without removing or disturbing the head or the staves, combined with a bung, *e*, having its beveled side or edge coincide with the bevel of such bung-hole, all as shown and set forth.

2. The keg or vessel described, adapted for holding white lead, paints, &c., provided with a permanent top head having the double-beveled edge, the downward-projecting shoulder, and the bung *e*, applied as set forth, and provided also with a bottom having the double-beveled edge and the upward-projecting shoulder, all substantially as shown and set forth.

ROBERT BURNS TURNBULL.

Witnesses:

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