(No Model.)

E. M. COOKE & W. P. PHILLIPS. REVERSIBLE CAN.

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United States Patent Office.

EUCLID MONROE COOKE AND WILLIAM PEPPER PHILLIPS, OF SWEPSON-VILLE, NORTH CAROLINA.

REVERSIBLE CAN.

SPECIFICATION forming part of Letters Patent No. 509,568, dated November 28,1893.

Application filed June 30, 1893. Serial No. 479, 269. (No model.)

To all whom it may concern:

Be it known that we, EUCLID MONROE COOKE and WILLIAM PEPPER PHILLIPS, citizens of the United States, residing at Swep-5 sonville, in the county of Alamance and State of North Carolina, have invented a new and useful Reversible Can, of which the following

is a specification.

Our invention relates to cans, such as are ro employed in dye-houses, cotton mills, &c., to receive the warp when it is desired to double the same two, three, or more times in order to bring the same into more convenient shape for handling; and our invention contemplates 15 the provision of a can having an interchangeable bottom adapted to be applied to either end of the body, whereby after the portions of the warp have been placed in the cans another head may be applied, the cans inverted, 20 and the top then removed in order to enable the operator to withdraw said portions of the warp without the risk of entangling the parts thereof.

Further objects and advantages of this in-25 vention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended

claims.

In the drawings: Figure 1 is a perspective 30 view, showing a series of cans embodying our invention arranged in operative position. Fig. 2 is a similar view, showing a lifting or reversing device, which may be employed to assist in the reversal of the cans. Fig. 3 is a 35 side view of the vessel. Fig. 4 is a similar view of the body portion thereof, the head being removed. Fig. 5 is a view of a slightly modified form of can having an unbroken cylindrical body portion and a removable head 40 connected thereto by a bayonet joint. Fig. 6 is a detail sectional view.

Similar numerals of reference indicate corresponding parts in all the figures of the

drawings.

In dye-houses it becomes necessary, in handling a warp of great length, such as several thousand yards, to bunch or double the same in order that it may be in convenient shape for handling. To accomplish this a series of 50 receptacles are provided and the warp is fed I the can is cylindrical, and is not split or di- 100

thereinto successively, a prearranged length being placed in each can. When this portion of the operation is completed, it is necessary for the operator to assemble the loops formed by feeding the warp successively into the 55 cans, and as such loops are at the bottoms of the several cans means must be provided for exposing the same.

In the construction illustrated in the drawings the body portion 1, of the improved can, 60 is split or divided longitudinally at one side to form an opening 2 the entire length of the can. The ends of this body portion may be slightly thickened or beaded, as shown in the drawings at 3, and a removable head 4 is 65 flanged to fit either end of the body portion.

The parts being in the positions shown in Fig. 1, the warp having been fed into the cans as described, it is required to reach the loops at the bottoms of the cans, and there- 70 fore an extra head is placed on the top of each can, the lifting device, which we have shown in connection with a can in Fig. 2, is engaged with the lugs or trunnions 4a, upon opposite sides of the body portion, and the 75. can is elevated and inverted, the head is removed from the upper end, and the loop of the warp may then be seized and drawn from the can.

It will be understood that while the slot or 80 opening in the side of the can is convenient as giving a slight spring action to the body portion to assist in holding the head in position, and at the same time in furnishing a passage for the withdrawal of the sides of the 85 loop, it may be dispensed with, and therefore we do not care to limit ourselves strictly to this feature of construction.

The rim 5 of the head is slightly rolled or thickened at its free edge, as shown at 6, to 90 fit over the beaded or rolled edge of the body portion to prevent accidental displacement, and in order to engage the head with one or other of the ends of the body portion the latter must be slightly compressed in order to 95 permit said thickened edges to pass.

In Fig. 5 we have shown a slightly modified form of can and means of attaching the head thereto, in which the body portion of

vided as shown in Figs. 1 to 4. The head is provided upon the inner side of its flange or rim 5 with inwardly-extending studs 7, which engage bayonet slots 8 in the ends of the

5 body portion.

This can is intended to be used in card rooms in cotton mills for the purpose of allowing the drawing or roving to be carried through the various processes of drawing in so one direction. To accomplish this, a continuous roll of drawing being run into a can until full or partly full, it is necessary in order to take that same roll through another process of drawing in the same direction that 15 the can be inverted, and to do this a head must first be placed on the top of the can, after which it may be inverted to allow the operator to reach the first end.

Various changes in the form, proportion, 20 and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of

this invention.

Having described our invention, what we

25 claim is—

1. A reversible can having a split or divided body portion capable of expansion and contraction at both ends and a head adapted to be fitted on either end of said body portion,

and held in place by said expansion substan- 30

tially as specified.

2. A reversible can having an expansible and contractible body portion split or divided longitudinally, from end to end and a head adapted to fit on either end of said body por- 35

tion, substantially as specified.

3. A reversible can having an expansible and contractible body portion provided with rolled or thickened upper and lower edges, and a head provided with a rim having a thick-40 ened edge to engage the rolled or thickened edges of the body portion, substantially as specified.

4. A reversible can having a split or divided body portion provided with exteriorly beaded 45 upper and lower edges, and a head provided with a peripheral rim having an interiorly beaded edge to engage the beaded edges of the body portion, substantially as specified.

In testimony that we claim the foregoing as 50 our own we have hereto affixed our signatures

in the presence of two witnesses.

EUCLID MONROE COOKE. WILLIAM PEPPER PHILLIPS.

Witnesses:

V. M. Euliss, WM. T. NOAH.