Dec. 12, 1944. S. N. DALEY 2,364,953

CORE CAP

Filed Aug. 24, 1942

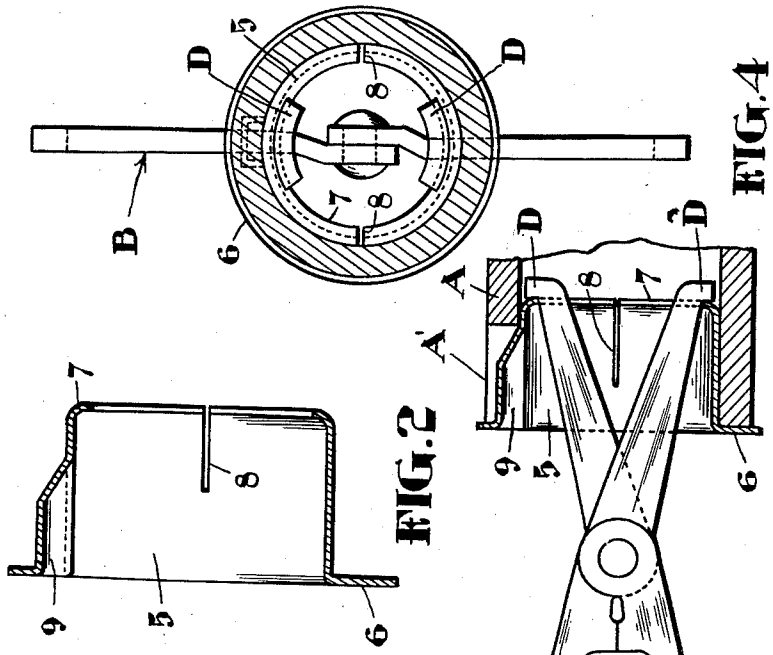


FIG. 4

FIG. 2

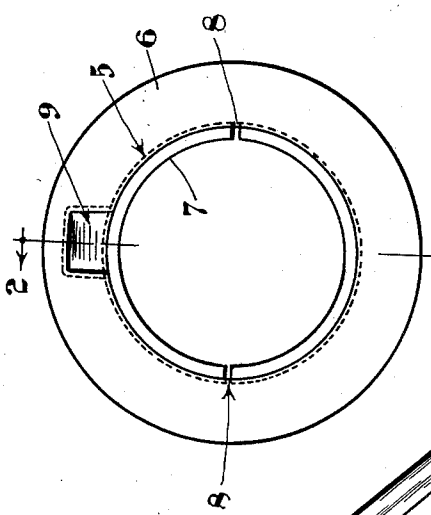


FIG. 1

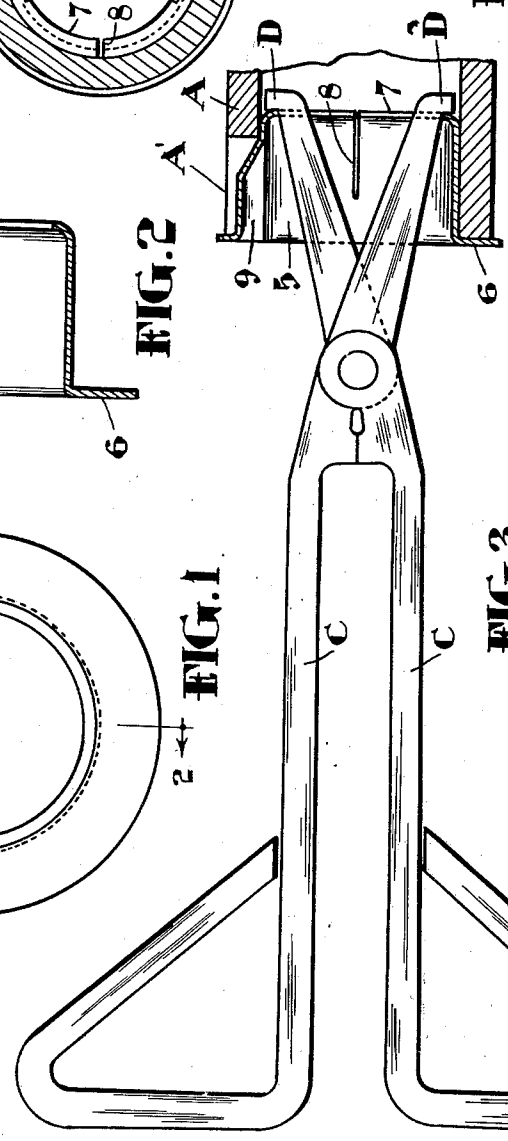


FIG. 3

INVENTOR
STEWART N. DALEY
BY Fetherstonhaugh & Co.
ATTORNEYS

Patented Dec. 12, 1944 2,364,953

UNITED STATES PATENT OFFICE

2,364,953

CORE CAP

Stewart N. Daley, Montreal, Quebec, Canada, assignor to Canadian International Paper Company, Montreal, Quebec, Canada

Application August 24, 1942, Serial No. 456,101
In Canada July 23, 1942

1 Claim. (Cl. 242—68)

This invention relates to core caps which are applied to the ends of a hollow tubular core on which paper is wound into a roll for mounting in a printing press, the purpose of such caps being to protect the ends of the core and to facilitate the mounting of the core and roll in the printing press.

One object of this invention is to improve the construction of such core caps so that, when the paper wound on the core to which the caps are initially applied is used up, the caps may be easily and conveniently removed from said core and reapplied to the cores of fresh paper rolls.

Another object is to construct the core caps so that they serve as an indicating means for warning the operator when the roll of paper wound on the core has been nearly used up and it is advisable to slow down for a change over.

Other objects, advantages and characteristic features of the invention will be more readily understood from the following detailed description taken in connection with the accompanying drawing, in which—

Fig. 1 is an end elevation of a core cap embodying my invention.

Fig. 2 is a sectional view taken substantially along the line 2—2 of Fig. 1.

Fig. 3 is a view illustrating the manner in which the core cap may be easily removed from a used core with the aid of a suitable tool. In this view the core cap and the core to which it is applied are shown in section.

Fig. 4 is an end elevation of the assembly shown in Fig. 3.

As shown in the drawing, my improved core cap comprises a thin tubular metal shell 5 having its opposite ends flanged to provide an outwardly directed flange 6 at one end and an inwardly directed flange 7 at the opposite end. The flange 7 is relatively narrow compared with the flange 6 and the latter is made wide enough so that, when the cap is applied to the core A as shown in Fig. 3, the flange 6 will abut the adjacent end of the core and will project an appreciable distance beyond the outer surface of the core on which the paper is wound. In other words, the width of the flange 6 is made appreciably greater than the thickness of the wall portion of the core in which the cap is fitted.

The shell or body portion 5 of the cap is provided with diametrically opposed slots 8 extending inwardly from the flanged end 7. These slots permit the two portions of the cap lying at opposite sides thereof to be squeezed together when the shell or body portion 5 of the cap is forced into the core as shown in Fig. 3. A portion of the shell is pressed outwardly to provide a recess 9 extending inwardly from the flanged end 6 and adapted to receive a conventional key or driving member when the core and the paper roll wound thereon are mounted in a printing press.

If the core cap is intended to be inserted in the end of a core having a wall thickness of approximately ½ inch the width of the cap flange 6 should preferably be about ¾ inch, so that this flange will project approximately ¼ inch beyond the outer surface of the core on which the paper is wound. When the diameter of the paper roll is diminished to that of the flange 6 the operator will know that only a ¼ inch roll of paper is left on the core and will be warned to slow down for a change over before the paper roll is completely exhausted.

The inwardly directed flange 7 enables the core cap to be easily and conveniently removed from the used core A with the aid of a suitable tool such as that indicated at B in Fig. 3. In the present instance the tool B is shown as comprising a pair of crossed handle members C provided with jaw members D adapted to be passed through the tubular shell 5 of the cap and engaged beyond the flange 7 to enable the core cap to be pulled clear of the core.

The core A is shown provided with a conventional slot A' to receive the projection formed by that portion of the cap shell 5 which is pressed outwardly to provide the recess 9.

Having thus described what I now consider to be the preferred embodiment of this invention it will be understood that various modifications may be resorted to within the scope and spirit of the invention as defined by the appended claim.

Having thus described my invention, what I claim is:

A core cap consisting of a one-piece, thin metal shell open at both ends to permit a tool to be passed therethrough for the purpose of engaging the tool with the inner end of the cap to withdraw it from an inserted position within a core, said shell being flanged to provide an outwardly directed core-engaging flange at its outer end and an inwardly directed tool-engaging flange at its inner end, the continuity of the inner flange and the body of the shell being interrupted by slots extending inwardly from the inner end of the shell to points terminating short of the outer end, the flange at the outer end of said shell being adapted to engage the adjacent end of the core and being of such width as to project beyond the outer surface of the core, the tool-engaging flange at the inner end of the shell being a relatively narrow flange of a uniform width considerably less than that of the outer flange.

STEWART N. DALEY.