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CORE FOR PAPER ROLLS

Filed Jan. 15, 1931

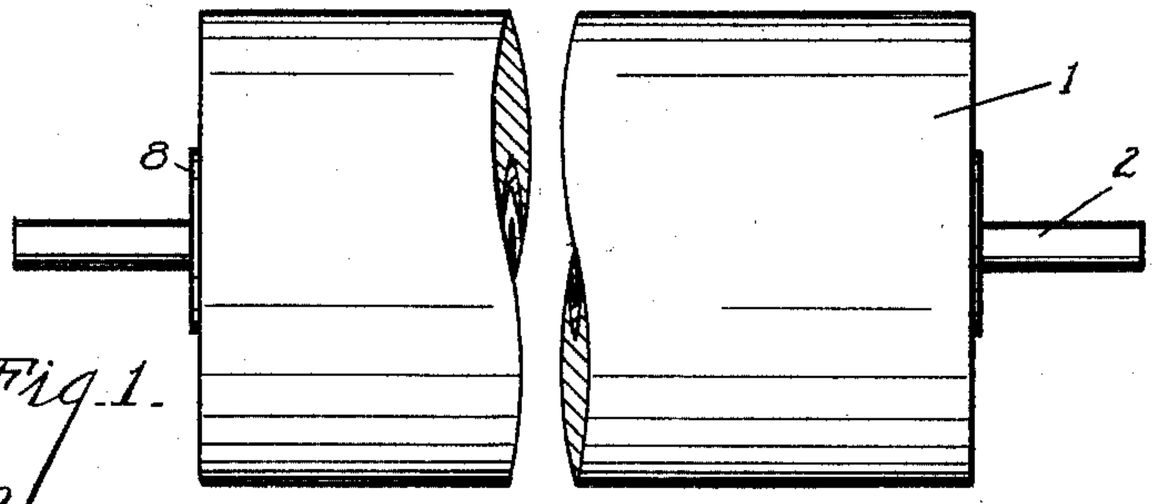

Fig. 1.

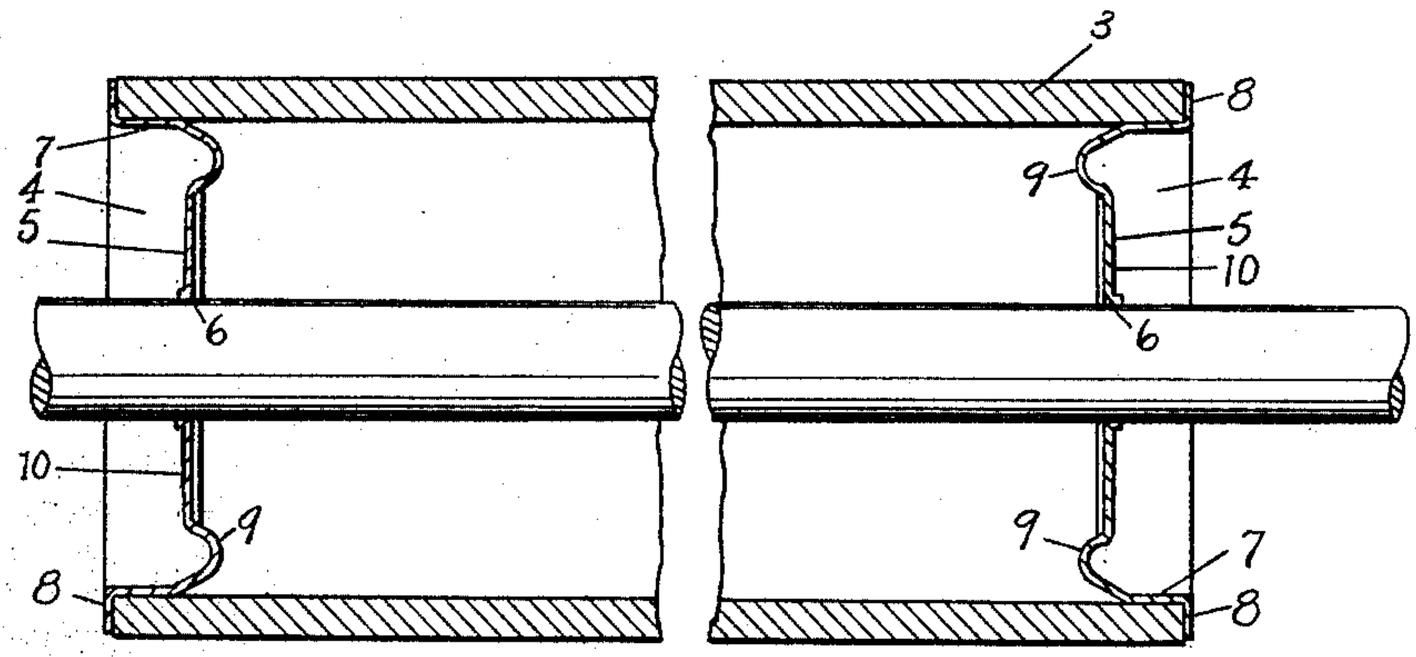

Fig. 2.

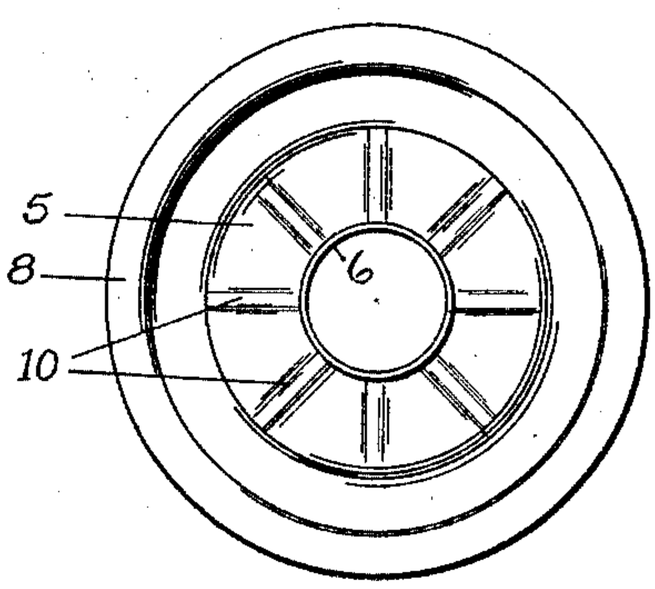

Fig. 3.

INVENTORS
James Earl Boldman
Arthur H. Fitzgerald
BY Chappell & Earl
ATTORNEYS

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UNITED STATES PATENT OFFICE

JAMES EARL BOLDMAN AND ARTHUR H. FITZGERALD, OF PARCHMENT, MICHIGAN, ASSIGNORS TO KALAMAZOO VEGETABLE PARCHMENT COMPANY, OF PARCHMENT, MICHIGAN

CORE FOR PAPER ROLLS

Application filed January 15, 1931. Serial No. 508,828.

The main object of this invention is to provide a core for paper rolls which is very strong and rigid and unlikely to be injured or distorted by rough handling such as that to which rolls of paper are commonly subjected in transportation and in the plant.

A further object is to provide a core plug for paper rolls having these advantages which may be very economically formed.

Objects pertaining to details and economies of our invention will definitely appear from the description to follow. The invention is defined in the claims.

A structure which embodies the features of our invention is clearly illustrated in the accompanying drawing, in which:

Fig. 1 is a fragmentary view of a roll of paper employing our improved core, a spindle or shaft being shown in operative relation to the roll of paper.

Fig. 2 is an enlarged fragmentary sectional view of our improved core, a spindle being shown in operative relation thereto.

Fig. 3 is an elevation of one of our improved core plugs.

In the accompanying drawing 1 represents a roll of paper and 2 a supporting shaft or spindle therefor. Our improved core comprises a cylindrical tubular body member 3 which is ordinarily formed of paper or fibrous material, no attempt being made in the accompanying drawing to illustrate the structure of this tubular body member.

The core plugs 4 are formed as sheet metal stampings and comprise web portions 5 having flanged central openings 6 for the shaft as 2. The core plugs are provided with rims 7 which fit within the body member 3, these rims terminating in outturned flanges 8 which overlap the ends of the cylindrical body member protecting it from injury and also properly positioning the cores in the body member.

The webs are provided with annular corrugation 9 which merges into the rim 7. It is also preferably provided with radial corrugations 10 at the inside of this annular corrugation. This results in a very stiff strong structure, even when made of relatively light material.

The cores may be made of relatively light material and at the same time are very strong and rigid. There are no projecting portions to be broken or injured as is frequently the case where wooden core plugs are employed, and the edges of the body member of the core are reinforced and protected.

Having thus described our invention what we claim as new and desire to secure by Letters Patent is:

1. A core for paper rolls comprising a cylindrical tubular body member, and sheet metal end members comprising webs having central flanged spindle openings and cylindrical rims fitting within the body member and terminating in out-turned flanges overlapping and protecting the ends of the body member, said web portion having an annular corrugation merging into said rim and radial corrugations at the inside of said annular corrugation.

2. A core plug for paper rolls formed as an integral sheet metal stamping and comprising a web portion having a flanged central spindle opening, and an annular core-engaging rim terminating in an outwardly projecting flange, said web portion having an annular corrugation adjacent said rim and radial corrugations at the inner side of said annular corrugation.

3. A core plug comprising a web portion having a flanged central spindle opening, and an annular core-engaging rim terminating in an outwardly projecting flange, said web portion having an annular corrugation adjacent said rim and radial corrugations at the inner side of said annular corrugation.

4. A core plug comprising a web portion having a central spindle opening, and an annular core-engaging rim, said web portion having an annular corrugation adjacent said rim and radial corrugations at the inner side of said annular corrugation.

In witness whereof we have hereunto set our hands.

JAMES EARL BOLDMAN.
ARTHUR H. FITZGERALD.