(No Model.)

J. H. PREATER.

PACKING OR SHIPPING DRUM.

No. 533,744. Patented Feb. 5, 1895.

Fig. 1.

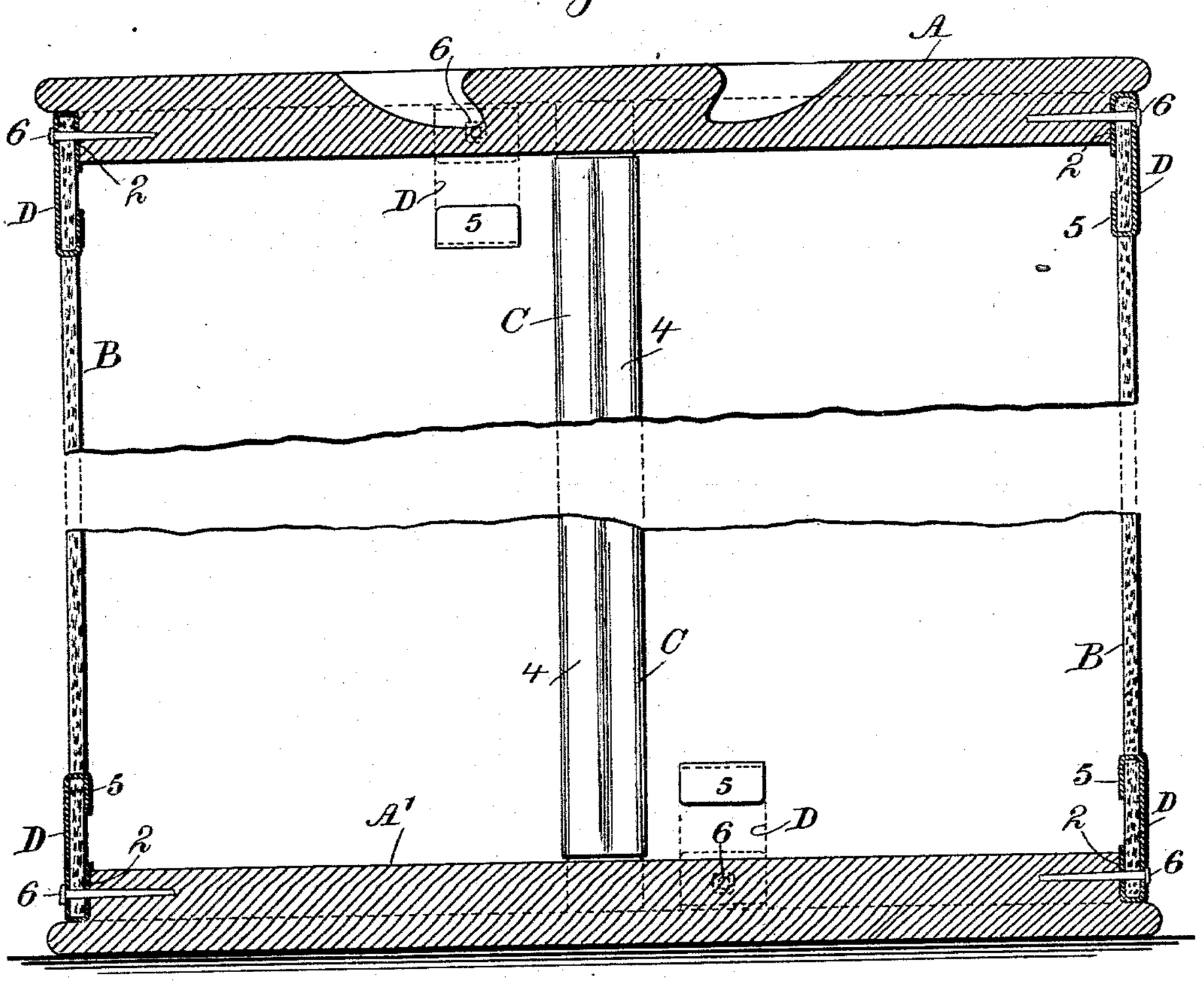


Fig. 2.

Fig. 3.

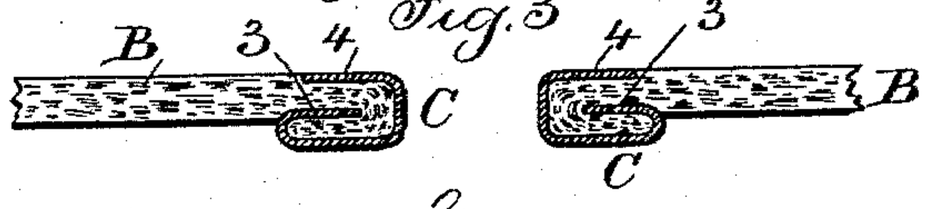
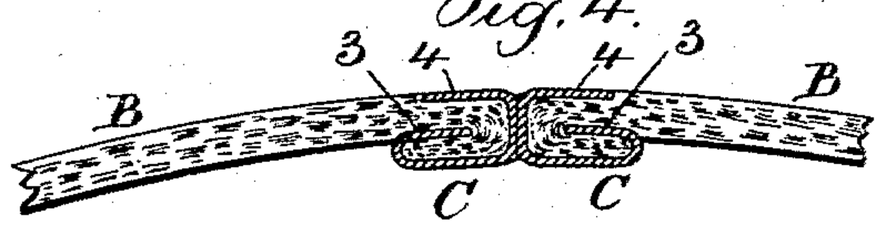


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES H. PREATER, OF BROOKLYN, NEW YORK.

PACKING OR SHIPPING DRUM.

SPECIFICATION forming part of Letters Patent No. 533,744, dated February 5, 1895.

Application filed October 29, 1894. Serial No. 527,195. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. PREATER, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Packing or Shipping Drums, of which the following is a specification.

In Letters Patent No. 223,949, granted to me January 27, 1880, strips of metal are represented as employed at the edges of the pasteboard or other material forming the cylindrical portion of the package, and a strip of metal with the edges bent over inwardly is employed for joining the material into the cylindrical form.

The present invention is made with reference to strengthening the cylindrical portion of the package and allowing the joining device to lie flat and occupy but little more thickness than the thickness of the card-board or other material forming the cylinder of the package; and to strengthen the connections between the wooden heads and the cylindrical portion of the package, strips of sheet metal are applied as hereiuafter set forth, the nails passing through the strips of metal and through the paper or straw board or similar material into the wooden heads.

In the drawings Figure 1 is a vertical section representing the two heads and portions of the cylindrical package. Figs. 2 and 3 are sections in larger size showing the manner in which the strip of metal is applied to the end of the thick paper, and Fig. 4 is a similar section showing the two ends with the join completed.

In constructing this package the heads A and A′ are usually of wood, turned up with a rabbet or shoulder 2 upon which the ends of the cylindrical portion of the package are received, and the cylinder B is made of paper such as paste-board, straw-board, mill-board or similar substance of the desired thickness and strength.

In packages that require the present improvement, the paper material is generally of considerable thickness and strength, and if such material was folded in its ordinary condition it would break and become valueless.

I provide folded strips C of sheet metal of a length preferably slightly less than the distance between the heads A and A′ and such strips are folded to fit upon each end of the strip of paper forming the cylinder B and the lapping portions of the strips C are wider at one side than the other, that is to say, the lapping portion 3 is narrower than the lapping portion 4. These strips of sheet metal are applied upon the ends of the paper B and may be slightly flattened to hold them in position, and where the paper B is rigid, in consequence of being thick, the paper is moistened or steamed at and adjacent to the places where the strips C are applied, and it is advantageous to moisten such paper after the strips have been applied; otherwise the moisture swelling the paper interferes with the insertion of the edge of the paper into the folded strip; and while the paper is sufficiently moist, a fold is made in the edge of the same so that the part 3 of the metal strip C is brought between the surface of the paper B and the edge that is folded over, as shown in Fig. 3. Thereby the fold holds the strip of metal securely to the paper and the strip of metal and the folded edge are flattened down to any desired extent without the paper breaking, and the metal is to be sufficiently stiff to hold the paper as it is flattened down or compressed.

After the two ends of the strip of paper forming the cylinder B have been prepared with strips of metal C as aforesaid upon them, such ends are brought together and soldered as shown in Fig. 4, thereby making a permanent connection between the two metal strips and joining up the paper into a cylindrical form; and in consequence of the stiffening action of the metal strips the joint thus produced is stronger than any other portion of the paper cylinder. The ends of the paper cylinder are prepared by folded strips of metal D at suitable distances apart around one or both ends and having the ends or tongues 5 passed through slits cut in the paper of the cylinder and turned over or clinched; and after the cylinder has thus been prepared the heads A and A′ are to be applied in position so that the ends set tightly and closely around the shoulders 2 of the heads, and nails 6 of suitable size are driven through the metal strips D into the heads A and A′ respectively, so as to make a very firm connection between the heads and the cylinder; and in conse-

quence of the nails passing through the strips D of metal the metal strips act to clamp the paper and also to grasp such paper by the tongues or ends 5 so that the nails cannot pull or tear out from the paper as would be the case if these metal strips were not made use of.

This package which is light and comparatively inexpensive can be made use of for coffee, spices, flour, sugar, or even heavy substances such as sand and emery, and the package can be lined with paper, muslin or other material pasted or caused to adhere in position, and a covering may also be pasted on the outside, which covering may be in the form of a paper wrapper or label and of a more or less ornamental character.

It will be apparent that these improvements are adapted to packages that are elliptical or polygonal the shape of the heads varying as desired.

I claim as my invention—

1. The combination with the thick paper forming the cylindrical or similar portion in a package, of metal strips applied upon the ends of the paper and such strips and the paper both folded over together and flattened to confine and hold the paper and the two metal strips brought together as the paper is bent into the form of a cylinder and the strips soldered together, substantially as set forth.

2. The combination with the paper cylinder or barrel and the wooden heads in a package, of strips of metal with their ends passed through the paper and bent down, such strips being at intervals around the ends of the cylinder, and nails passed through such strips into the heads of the package, substantially as set forth.

3. The combination with the paper cylinder or barrel and the wooden heads in a package, of strips of metal placed at intervals around the end of the cylinder each strip having one end passed through the paper and folded down and the other end folded around the edge of the paper, and nails passed through such folded strips into the head of the package, substantially as set forth.

4. The method herein specified of uniting the ends of strips of thick paper forming the cylindrical or other portions in a package, consisting in applying to the ends of paper, folded strips of metal, moistening the paper and folding the paper and the metal strips over and flattening the same and then bringing the metal strips and the ends of the paper together and soldering them for uniting the thick paper into a substantially cylindrical barrel, substantially as set forth.

Signed by me this 27th day of October, 1894.

JAS. H. PREATER.

Witnesses:
GEO. T. PINCKNEY,
S. T. HAVILAND.