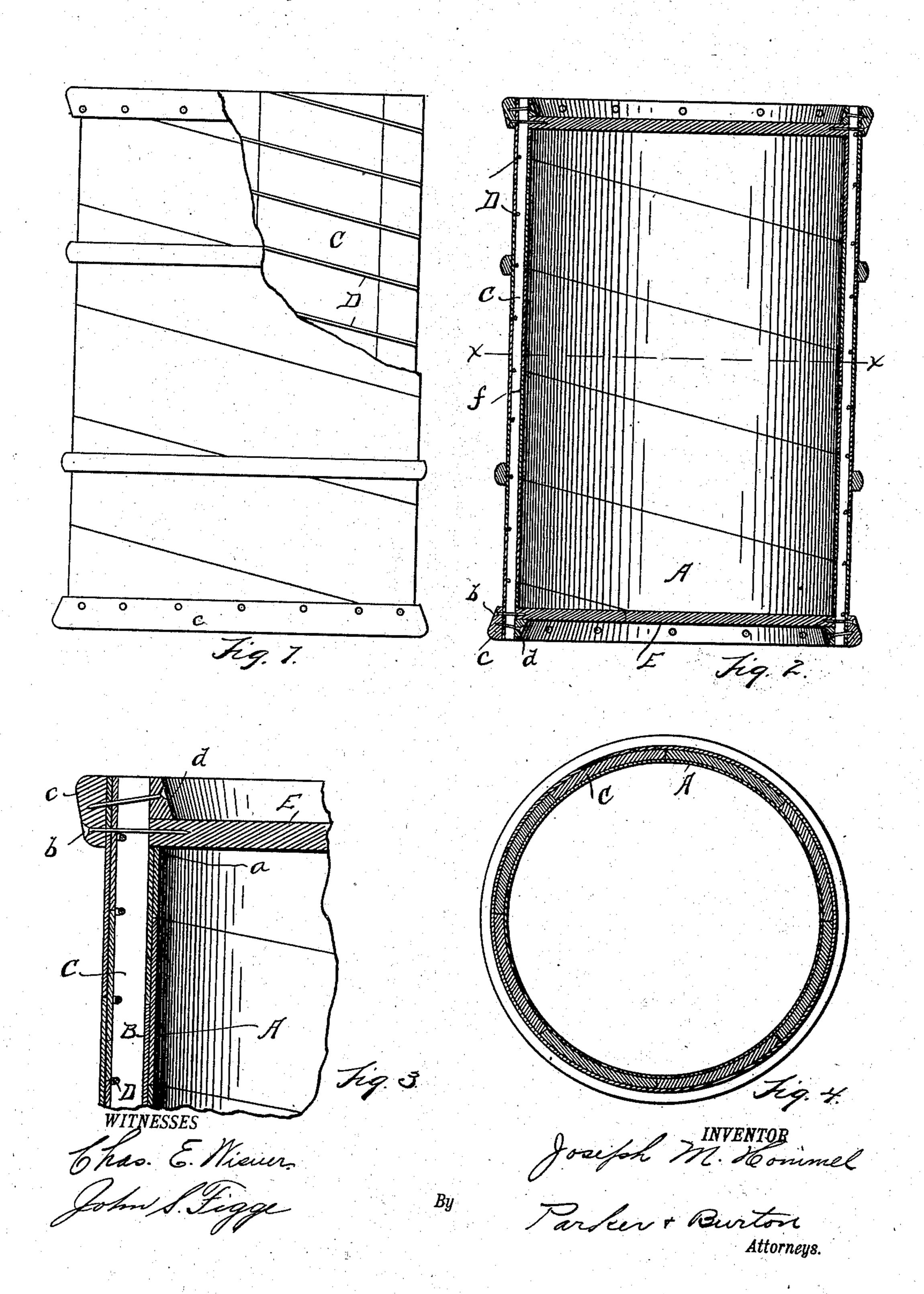
J. M. HOMMEL.

PACKAGE FOR STORING AND SHIPPING.

APPLICATION FILED MAR, 10, 1902.

NO MODEL.



United States Patent Office.

JOSEPH M. HOMMEL, OF DETROIT, MICHIGAN.

PACKAGE FOR STORING AND SHIPPING.

SPECIFICATION forming part of Letters Patent No. 719,803, dated February 3, 1903.

Application filed March 10, 1902. Serial No. 97,446. (No model.)

To all whom it may concern:

Be it known that I, Joseph M. Hommel, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Packages for Storing and Shipping; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to packages for storing and shipping goods, and has for its object an improved package made of combinations of wood and paper both and secured together by wire wound spirally and covered beneath an outer covering with paper.

In the drawings, Figure 1 is an elevation of the part of the external covering broken away. Fig. 2 is a vertical section. Fig. 3 is an enlarged detail. Fig. 4 is a horizontal section.

The receptacle comprises, first, an inner layer of paper or similar fibrous material A, wound spirally and preferably wound double, as shown in Fig. 3, with the outer layer B breaking joints with the inner layer. To these are placed longitudinally strips C of wood or similar strengthening material,

placed somewhat in the manner of staves, although not necessarily so closely joined at the edges as the staves in a barrel. Around 35 this is wire D in a spiral form in grooves cut spirally around the staves and outside the wire strips of paper again wound spirally. In making these packages, I prefer to make it in the long practically continuous tube,

40 which is cut off into lengths to make the package of the proper length.

The heads of the package E are secured in any suitable way—as, for example, by cutting the inner layer of paper and forming a shoul-45 der a, on which the head E rests. The head, of any suitable material, is then placed in the package resting on the shoulder a and se-

cured by nails b, preferably driven through a hoop c, that secures and protects the end of a package, and an inner hoop d, placed over 50 the head E, holds the head in place. A number of layers of paper or fibrous material inside the staves, and the number of paper or fibrous material external to the staves and the closeness of wind of the spiral wire or the 55 use of the spiral wire at all, depends on the nature and size of the package. For larger and stronger packages the number of coils of the wire around the package may be made to accord with the use to which the package is 60 to be put, as when a great strength is required more coils of wire will be used than where little strength is required.

The staves may be laid in place either running from end to end of the package or some 65 of them breaking joints, as indicated at F in Fig. 2. Preferably the various layers of ma-

terial are cemented together. What I claim is—

1. In a package, the combination of an in-70 ner layer of fibrous material spirally wound, a strengthening layer of longitudinally-arranged staves, a strengthening-wire spirally wound around the staves and an external covering of fibrous material spirally wound, 75 substantially as described.

2. In a package, staves laid longitudinally to the axis thereof, a spiral groove of a plurality of turns in the outer surface thereof, and a continuous wire laid in said groove and 80

fastened at its ends.

3. In a package, the combination of an inner layer of fibrous material spirally wound, a strengthening layer of longitudinally-arranged slats provided with a spiral groove, a 85 strengthening-wire laid in the spiral groove and an external covering of fibrous material spirally wound, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

JOSEPH M. HOMMEL.

Witnesses:

MAY E. KOTT, C. F. BURTON.