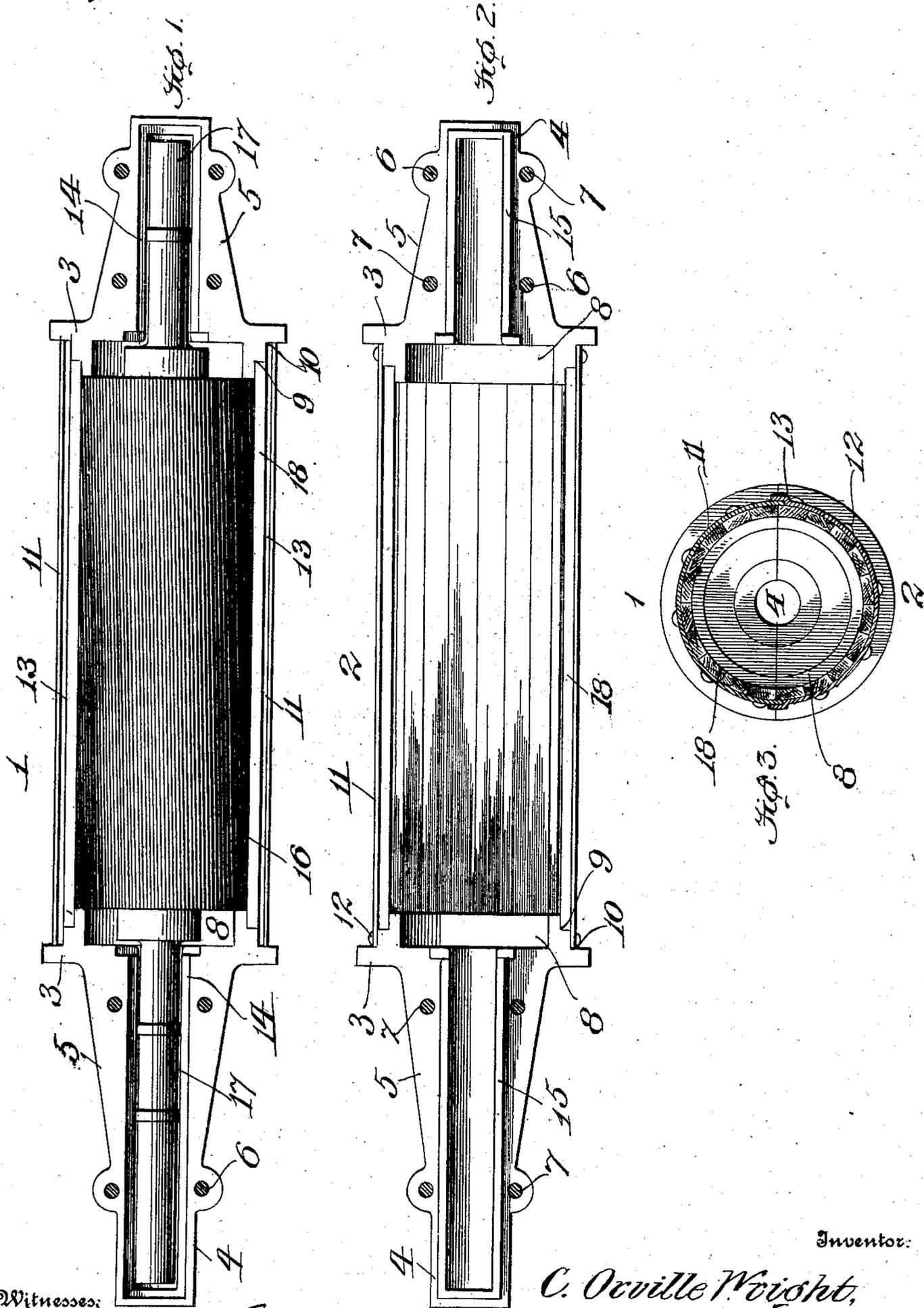


C. O. WRIGHT.
 SHIPPING CASE.
 APPLICATION FILED JUNE 8, 1909.

973,607.

Patented Oct. 25, 1910.



Witnesses:
[Signature]
[Signature]

Inventor:
 C. Orville Wright,
 By *[Signature]*
 Attorney.

UNITED STATES PATENT OFFICE.

CHARLES ORVILLE WRIGHT, OF BLUEFIELD, WEST VIRGINIA.

SHIPPING-CASE.

973,607.

Specification of Letters Patent.

Patented Oct. 25, 1910.

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To all whom it may concern:

Be it known that I, CHARLES ORVILLE WRIGHT, a citizen of the United States, residing at Bluefield, in the county of Mercer and State of West Virginia, have invented a Shipping-Case, of which the following is a specification.

This invention relates to improvements in shipping cases or crates, and is primarily intended for use in shipping grinding-rolls employed in flour mills, although, as will be apparent, it may be used to advantage for shipping in a safe manner articles other than such rolls.

The principal objects of the invention are to provide a shipping case or crate designed to receive and thoroughly protect objects to be shipped, the latter consisting of a cylindrical or other shaped body from the axial ends of which project a journal, such, for instance, as a grinding-roll, &c.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawing, Figure 1 is a plan view of one of the sectional halves of the shipping case, a grinding-roll being shown in position therein; Fig. 2 is a similar view of the companion sectional half; and Fig. 3 is a transverse sectional view of the shipping case complete and empty.

Similar numerals of reference indicate similar parts in all the figures of the drawing.

In carrying out my invention, I employ two longitudinal halves or sections 1 and 2, and each comprises a somewhat heavy semi-circular cast-metal head 3, or rather a pair of such heads, from the center of each of which projects a tubular sleeve or extension 4, preferably closed at its outer end. Each of these tubular sleeves or extensions is strengthened by means of opposite flanges 5, which extend from the semi-circular head 3 to points near the outer ends of the sleeves or extensions, said flanges being reduced toward their outer ends, and further provided with alining bolt-holes 6. In this manner, it will be seen, that, when the semi-circular heads of the two companion sections or halves are brought together, bolts 7, may be employed for securing the two sections or halves together.

The interior face of each of the semi-circular heads 3, is formed with a semi-circular

flange 8, the same being located a short distance within the perimeter of the said head, and at its outer side provided with a semi-circular shoulder 9, also a short distance from the perimeter of the head, thus forming an outer semi-circular shoulder 10.

Each pair of semi-circular heads of a section is connected by a semi-circular sheet-steel casing 11, the opposite ends of which rest within the outer semi-circular shoulders 10 thereof, at which points the casing is riveted to the heads, as at 12. As best shown in Fig. 3, it will be seen that the longitudinal edges of the sheet-metal casing of the section or half 1, are extended slightly beyond the transverse faces of the heads 3, while the corresponding edges of the companion section or half are slightly off-set or flared, as at 13, to receive the same, whereby a closed joint is formed.

In order that a closed joint may be formed substantially around the entire case, I may prefer to provide each of the tubular extensions or sleeves of the section or half 1, with a groove 14, and the corresponding section 2, with a rib or flange 15, conforming to and adapted to enter said groove. Such a construction will permit the two sections or halves to come together sufficiently close to obviate an undesirable intermediate opening, and will also permit the two sections or halves to adjust themselves to a limited degree to the diameter of the roll 16, the body portion of which, as will be seen, rests within the sectional halves, the opposite journals 17, extending into the tubular sleeves or extensions thereof.

In a patent heretofore granted me, to wit, on the 30th day of April, 1907, No. 852,010 for a similar invention, it was designed that the roll when packed within the shipping case, should be supported by the journals of the roll. I find, however, that in actual practice, it is better that the roll support itself, or, in other words, that the journals be relieved from weight and the roll be made self supporting. This, of course, necessitates that the tubular sleeves or extensions designed to receive the journals, be made somewhat greater in diameter than the journals themselves and that the cylindrical body portion of the shipping case approximate in diameter that of the roll. As contact between the cutters of the roll and the metal casing would be injurious to the former, I prefer to line the casing either

with a lining of veneer or a series of strips, as 18, of wood. In either instance, I prefer to retain the lining in position by inserting the ends of the lining under the shoulders 9.

5 It may be desirable to rivet the metal case and the wood lining together, or, in other words, have the rivets 12 pass through the metal casing the lining and the flange 8, but in the present instance, I have merely shown

10 the lining as interposed between the metal casing and the flange 8, so that said lining may be readily removed and replaced. It will be seen that the metal casing is not located flush with the perimeter of the heads,

15 so that the latter's edges constitute very convenient rollers or wheels by which the case can be rolled about without injury to the sheet-metal casing. As the grinding-

20 rolls are from time to time ground and hence their diameters slightly reduced during such process, it is desirable, in order to have the casing fit the roll, that the former be capable of some limited adjustment. The construction heretofore described, that is,

25 the slip-joints, permits this to be done, and yet, as will be apparent, no undesirable crevices or openings are permitted to occur in the casing.

Having described my invention, what I

30 claim, is:

1. A shipping case for the purpose set forth, comprising longitudinal half-sections each consisting of opposite semi-circular heads having a recessed extension at the

35 outer side and a flange at the inner side, the latter forming a shoulder within the perimeter of the head, together with a semi-circular body portion or casing connecting

the heads of each section and secured to the flanges thereof, and means for connecting 40 the half-sections together, substantially as shown and described.

2. A shipping case for the purpose set forth, comprising longitudinal half-sections each consisting of opposite semi-circular 45 heads which have a recessed extension at the outer side and a stepped flange at the inner side, the latter forming shoulders within the perimeter of the head; together with semi-circular body portions or casings for each 50 section connecting the heads thereof and secured to the flanges, and means for connecting the half-sections together.

3. A shipping case for the purpose set forth, comprising longitudinal half-sections 55 each consisting of opposite semi-circular heads which have a recessed extension at the outer side and a stepped flange at the inner side forming shoulders within the perimeter of the head, the extension of a head of one 60 section having a projecting flange around the recess and the companion head of the other section having a groove to receive said flange; together with semi-circular body 65 portions or casings for each section connecting the heads thereof and secured to the flanges, and means for connecting the half-sections together.

In testimony whereof I have signed my name to this specification in the presence of 70 two subscribing witnesses.

CHARLES ORVILLE WRIGHT.

Witnesses:

L. T. McCUE,
T. P. WATTS.