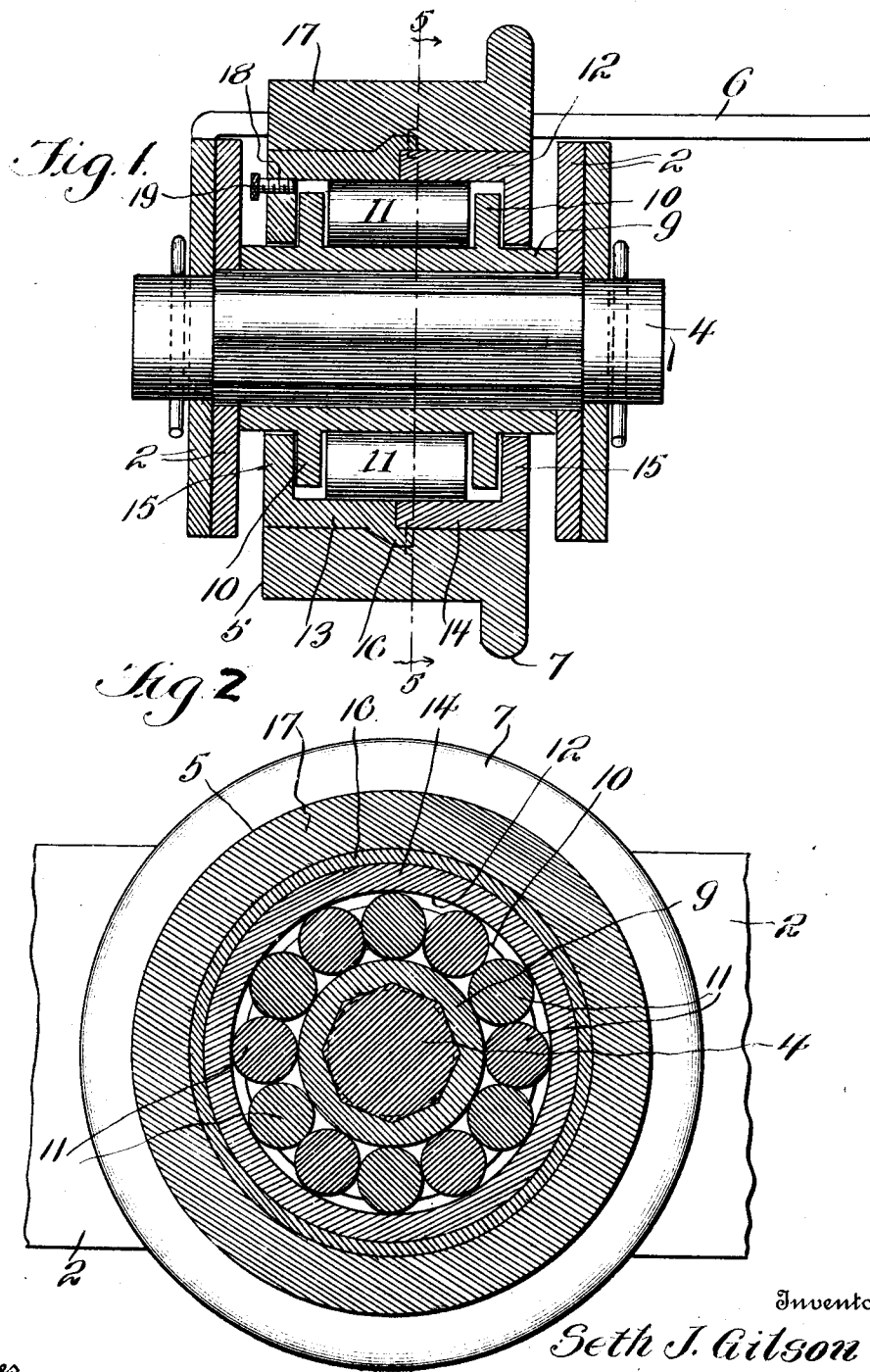


S. J. GILSON.
 ROLLER BEARING.
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1,066,402.

Patented July 1, 1913.



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UNITED STATES PATENT OFFICE.

SETH J. GILSON, OF SHARON, PENNSYLVANIA.

ROLLER-BEARING.

1,066,402.

Specification of Letters Patent.

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Application filed March 21, 1911. Serial No. 615,849.

To all whom it may concern:

Be it known that I, SETH J. GILSON, a citizen of the United States, residing at Sharon, in the State of Pennsylvania, have invented new and useful Improvements in Roller-Bearings, of which the following is a specification.

This invention relates to improvements in wheels, and the primary object of the invention is to construct an anti-frictional wheel primarily adapted for use in connection with hot metal casting machines, the said wheel having its parts so constructed and arranged as to permit the free rotation of the same while excluding all foreign substances such as dust, hot water, lye or metal sparks.

With the above object in view, and others which will appear as the nature of the description progresses, the invention resides in the novel construction and arrangement of parts hereinafter fully described and claimed.

In the accompanying drawings there has been illustrated a simple and preferred embodiment of the improvement, and in which drawings—

Figure 1 is a longitudinal sectional view of my improved type of wheel. Fig. 2 is a transverse sectional view through one of the wheels.

My improved wheels 5 have their rims preferably provided with the usual flanges 7 so as to prevent the lateral movement of the same upon the tracks and the like. The pin or axle 4 of each of the wheels has its inner or body portion of an angular formation, while its ends are round, and the said angular body portion is adapted to be received within the angular bore of what I term the boxing 9 of the axle 4. The boxing is of a lesser length than the pin axle 4, and its sides or edges are adapted to contact with the links 2 of the conveyer. The boxing 9 is provided adjacent each of its ends with an annular flange or projection 10, and the space between these flanges is adapted to serve as a pocket for the reception of anti-frictional rollers 11.

The numeral 12 designates the housing for the rollers. This housing comprises a pair of sections 13 and 14. Each of these

sections are of a circular formation having their sides off-set to form dust-proof wheels 15, the latter being arranged only a slight distance away from the annular projections 10 of the boxings 9. One of the sections of the housing, 13, is formed at its inner end with an off-set enlargement 16, and the opposite section 14 has its ends inserted between the enlargement 16 and the end of the section 13. It will be noted that the sections of the housing are adapted to contact with the bearing rollers 11, and when the parts are thus assembled, a tread 17 is cast or otherwise securely connected with the housing 12. By this arrangement, it will be noted that the rotary portions of the wheel, with the exception of the rollers 11, form what may be termed a single piece and that the rollers are effectively housed so as to prevent the seizing of the said rollers of foreign substances, such as hot water, lye, metal sparks, etc., to which all wheels for hot metal casting machines are exposed.

One of the housing sections, say 13, has its flange provided with an opening 18, the same being merely closed through the medium of a suitable stopper 19, and this opening is adapted to serve as a means whereby the rollers 11 may be lubricated.

Having thus fully described the said invention, what I claim is:—

In combination an axle, a boxing mounted upon the axle, said axle and boxing being formed to prevent any accidental rotation of the boxing thereon, said boxing having its outer face of circular formation provided with a pair of relatively spaced outwardly projecting annular flanges, said flanges being disposed adjacent the terminal portions of the boxing, bearing rollers between said flanges, a housing comprising a pair of annular members resting upon said rollers and each having an inwardly directed side flange disposed in spaced relation to the outer faces of said first named annular flanges and terminating in spaced relation with the outer face of the boxing, the inner edges of one of said members having an annular offset enlargement adapted to overlie the inner edge of the other member, one of said sections being provided with

a lubricant opening, means for closing the opening, a member connected to the outer members of the housing and of a width equal to the width of the said housing, the
5 said sections meeting and overlying at a point intermediate of the length of the wall of the member.

In testimony whereof I affix my signature in presence of two witnesses.

SETH J. GILSON.

Witnesses:

JOHN E. BOWIE,
WM. K. WATSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."