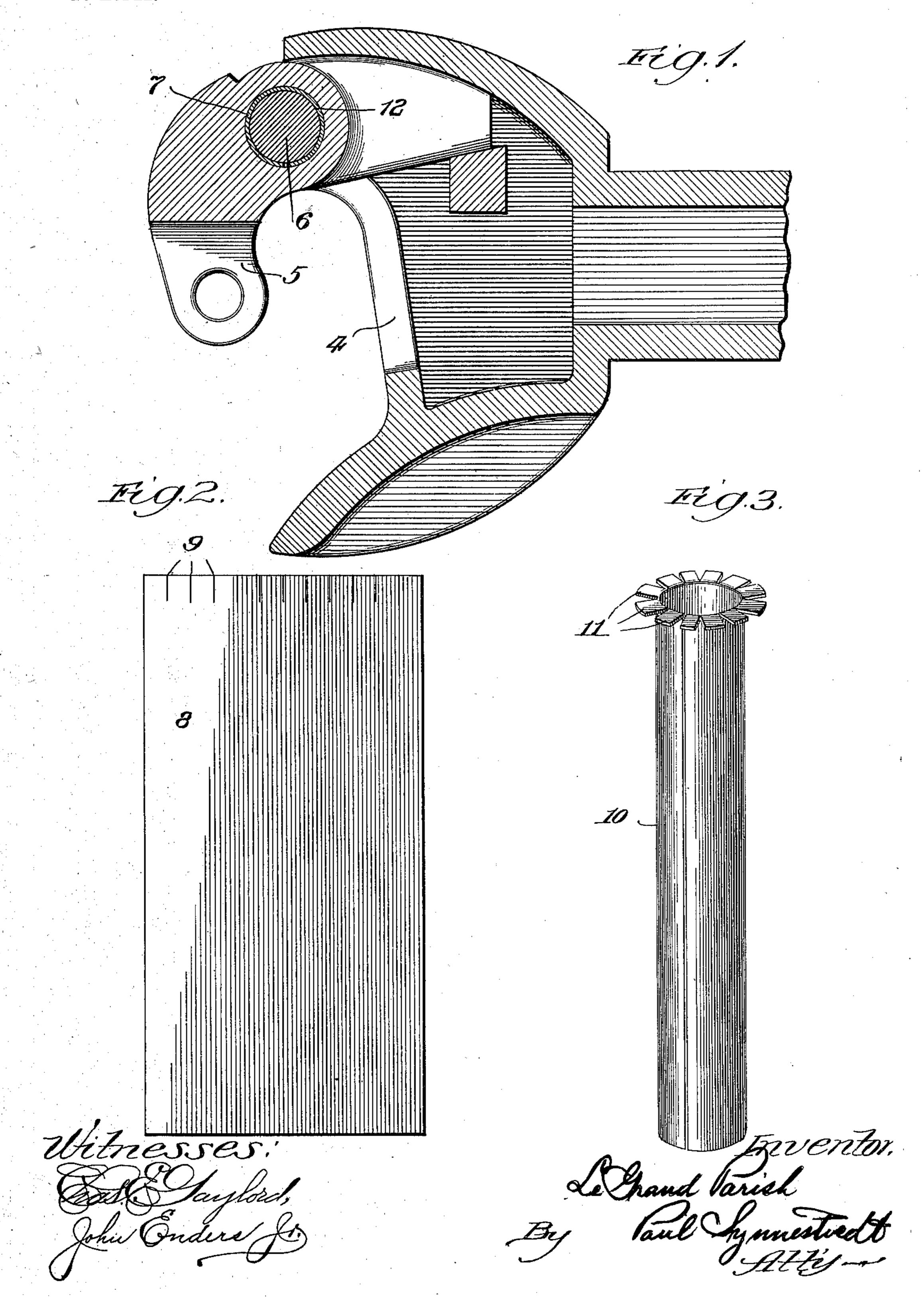
## LE GRAND PARISH. WEAR COMPENSATING DEVICE. APPLICATION FILED COT. 31, 1901.

NO MODEL.



## United States Patent Office.

LE GRAND PARISH, OF CHICAGO, ILLINOIS.

## WEAR-COMPENSATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 732,887, dated July 7, 1903.

Application filed October 31, 1901. Serial No. 80,710. (No model.)

To all whom it may concern:

Be it known that I, LE GRAND PARISH, a citizen of the United States of America, and a resident of Chicago, in the county of Cook 5 and State of Illinois, have invented certain new and useful Improvements in Wear-Compensating Devices, of which the following, taken in connection with the accompanying

drawings, is a specification.

This invention has reference to devices designed for use in taking up wear, such as occurs where pivot-pins are used in conjunction with relatively movable parts held by such pins—such, for example, as the pivot-pin em-15 ployed in conjunction with the knuckles of the standard form of Master Car-Builders' coupler, and has for its object primarily the provision of a device of the class specified, which will be cheap to construct and yet sat-20 isfactory in its action, being capable of being made at low cost of a variety of thicknesses.

The above, as well as such other objects that may hereinafter appear, I attain by means of a construction which I have illus-25 trated in preferred form in the accompanying

drawings, in which—

Figure 1 is a plan section of a Master Car-Builders' coupler having my improvement applied thereto. Fig. 2 is a view of a blank 30 piece of metal intended to be used in the construction of one of my improved wear-compensating devices, and Fig. 3 shows the device

in completed form ready for use.

Referring particularly to Fig. 1, it will be 35 seen that I have shown thereon a couplerhead 4, provided with a knuckle of ordinary construction 5, which is secured in place in the coupler-head by means of the pivot-pin 6. As is well known to railroad men, the pin 40 6, together with the opening 7 in the knuckle, as well as the corresponding opening in the head, is subject to considerable wear, and in view of the necessity for keeping the contour lines of the coupler up to the standard of the 45 gage employed for that purpose a relatively small amount of such wear makes it necessary to discard either the knuckle or the head, or both, in many cases where the employment of my invention would bring the parts back 50 to proper alinement without interfering in any manner with the proper operation of the

occasioned by the discarding of the coupler

or knuckle, or both.

In order to avoid the expense incident to 55 the construction of wear-compensating devices of cast metal turned and forged true to size, I construct my wear-compensating device by taking first a flat blank or piece of sheet metal 8, notching or slitting one of the 60 ends thereof, as indicated at 9, rolling the blank into cylindrical form, thus forming the body portion 10, as shown in Fig. 3, and then upsetting or bending the flange 11 upon the top of the body portion 10, as indicated in 65 Fig. 3, in order to form a kind of head for the wear-compensating device. It is obvious that in constructing my improvement in this manner I am enabled to make it at a very low cost, since the process or method followed 70 is obviously a simple one and does not even require welding of the seam where the edges of the sheet metal come together. By leaving the meeting edges unconnected, as shown, I also provide a certain amount of resiliency 75 whereby the shank can be made of such a size as will require it to be sprung a little in putting it in place, thus affording a means for more securely holding it, as well as rendering it unnecessary to have it such a very 8c accurate fit.

Another advantage of my improvement is that by taking sheet metal of different thicknesses different sizes of compensating devices may be constructed without material addi- 85

tional expense.

It is also obvious that by my improvement I am enabled to secure a wear-compensating device of a soft or hard ductile metal, as may be preferred, and one which while very thin 90 will yet at the same time be of uniform thickness at all places throughout its body portion or shank.

In applying my improvement I place it as indicated at 12 in Fig. 1, where it is shown 95 surrounding the pivot-pin of a car-coupler knuckle.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

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1. The combination with a pin-and-socket joint, of a wear-compensating device formed of a removable cylinder of sheet metal rolled coupler, and thus avoiding the waste and loss | into form with the meeting edges thereof unconnected, and provided with means to hold it in place, substantially as described.

2. A wear-compensating device formed of a piece of sheet metal rolled into cylindric form with unjoined edges and having one edge notched or slitted and upset to form a flange, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

LE GRAND PARISH.

In presence of—
PAUL SYNNESTVEDT,
PAUL CARPENTER.