

JAMES YOCUM, Jr.

Improvement in Split Castings.

No. 116,134.

Patented June 20, 1871.

Fig. 1.

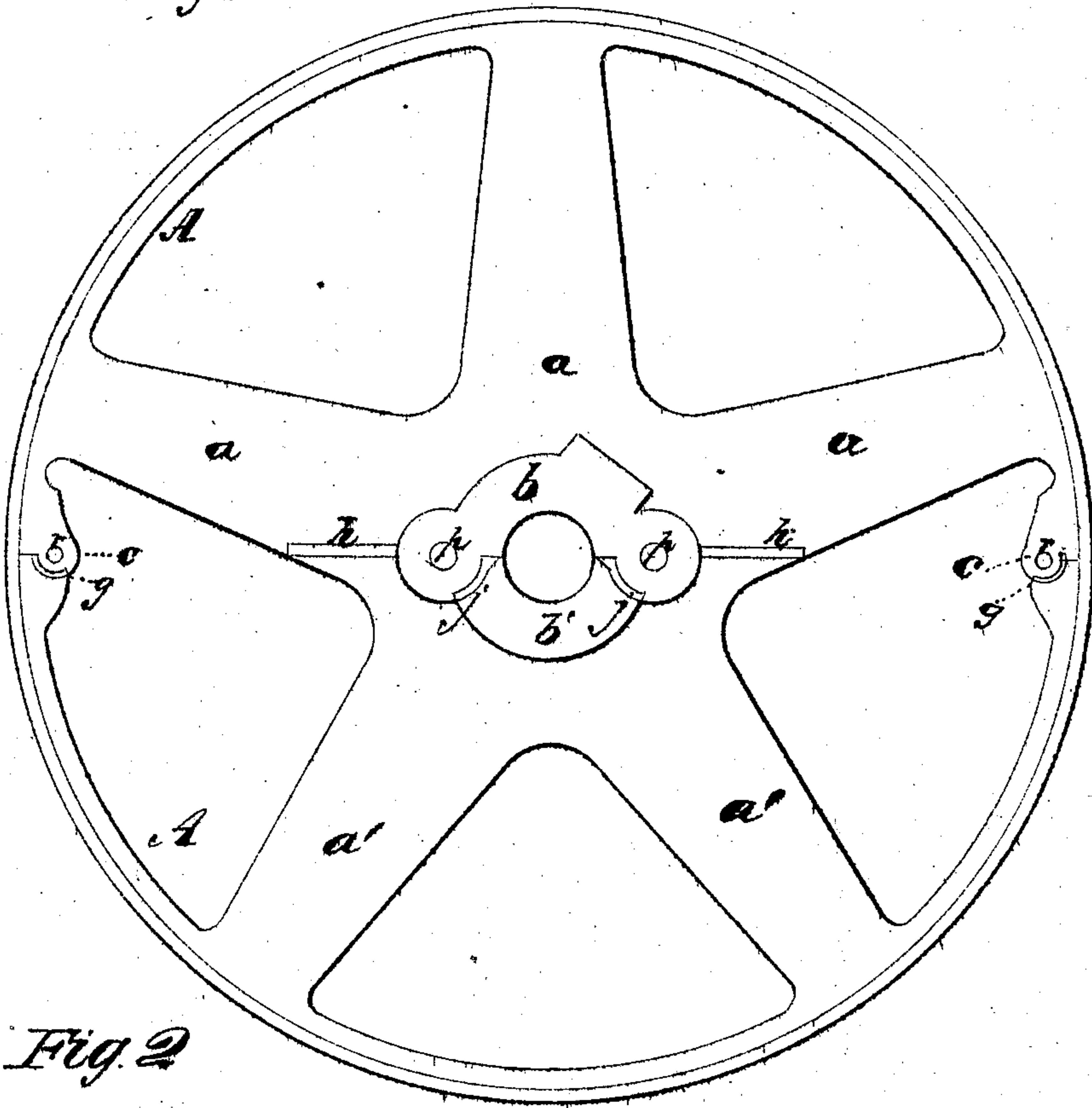


Fig. 2.

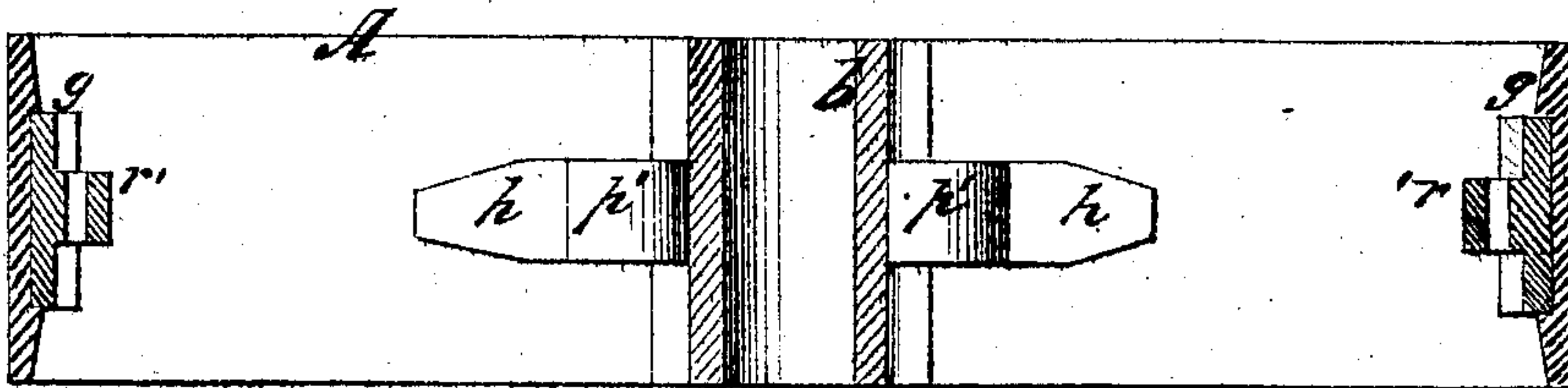
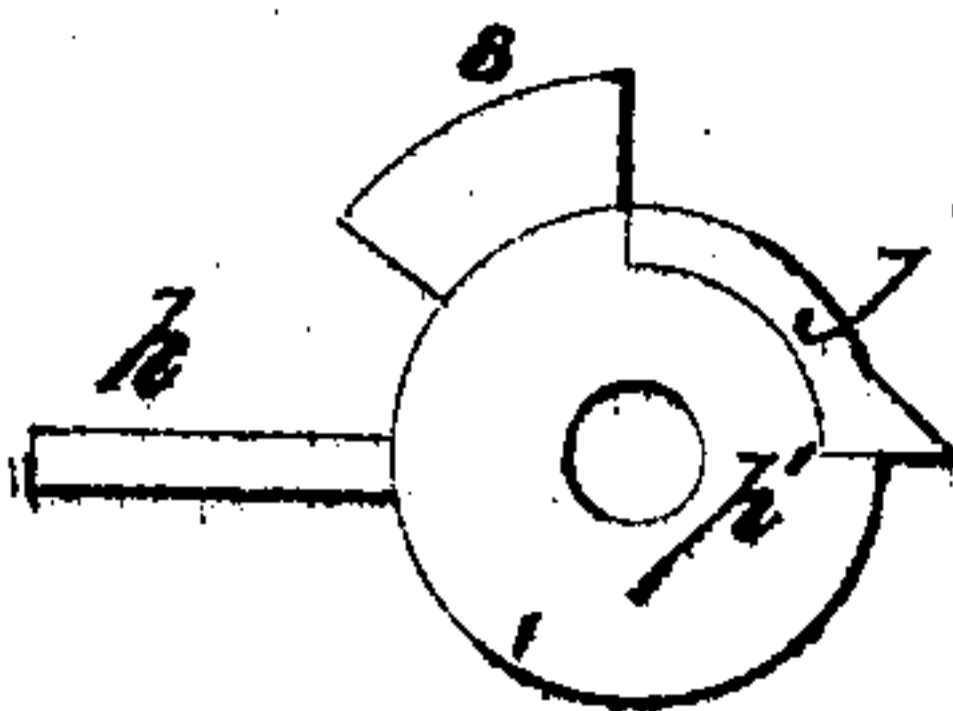


Fig. 3.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN SPLIT CASTINGS.

Specification forming part of Letters Patent No. 116,134, dated June 20, 1871.

To all whom it may concern:

Be it known that I, JAMES YOCOM, Jr., of the city and county of Philadelphia and State of Pennsylvania, have invented a new and Improved Mode of Making Split Castings; and I do hereby declare that the following is a full, clear, and exact description of my invention, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a view of one side of a belt-wheel or pulley constructed after my improved mode. Fig. 2 is a diametrical section through the pulley. Fig. 3 is a view of one of the perforated pieces which are cast in the wheel.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement in the manufacture of belt-pulleys, gear-wheels, coupling-sleeves, and other castings which it is desired to have of two detachable halves or sections.

The following description of my invention will enable others skilled in the art to understand my invention.

The drawing represents my invention applied to a belt-pulley, but I do not desire to be understood as confining myself thereto, as the invention is applicable to sectional castings of other kinds.

A represents the rim of the pulley, which, with the hub, is diametrically divided and united by means of interlocking-joints and pins, somewhat like hinge-joints. The mold for this wheel is made in sand in the usual well-known manner; and into this mold pieces *p p'* and *g g* are adjusted, which pieces have holes through them. The pieces *p' p'* are adjusted on opposite sides of the core for the hub of the wheel, and the pieces *g g* are adjusted in the space which receives the metal that forms the rim A. Before the said pieces are adjusted in the mold those surfaces of them which are to be exposed after the wheel is cast and divided are clay-washed to prevent the metal from adhering to them. The metal is then poured into the mold and fills every

space therein, so that the wheel appears, when cold, as represented in Fig. 1; and as the clay-washed surfaces of the pieces *p' p' g g* do not adhere to the metal the wheel can be readily separated into halves or sections. Those surfaces of the two sections of the wheel which come together are counterparts of each other, and the perforated ears *p' p'* and *r' r'* are received between corresponding perforated ears *p p r r*, thus forming interlocking-joints for the hub of the wheel as well as for the rim thereof. By inserting pins through the perforated ears after the two parts of the wheel are adjusted together these parts will be firmly united. The pieces *p'* are constructed with wings *h* and extensions *j* for enabling the two parts forming the wheel to be readily separated at the hub; and these pieces *p' p'*, as well as the pieces *g g*, are made with dovetail lugs *s*, or extensions of any other suitable shape, as shown in Fig. 3. These extensions *s* are formed on those surfaces of the pieces which are not clay-washed, and to which it is desired the metal should adhere.

It will be seen from the above description that I form a two-part or divisible wheel, the parts of which are connected securely together by interlocking-lugs and by pins passed through these lugs, and that I produce lugs on the two parts of the wheel in the act of casting the wheel.

I am aware that belt-pulleys and other wheels have been hitherto constructed of sections for readily applying them on and removing them from shafting, and I do not claim, broadly, this feature as my invention.

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

A metal casting which is separated or split by means of one or more pieces of metal, which form, when the wheel is cast, interlocking-joints for the sections, substantially as described.

JAMES YOCOM, JR.

Witnesses:

J. M. COLGAN,
C. R. SPANGLER.