(No Model.)

M. I. CORTRIGHT.

SECTIONAL CAM FOR ORE BATTERIES.

No. 522,880. Patented July 10, 1894.

Fig. 1.

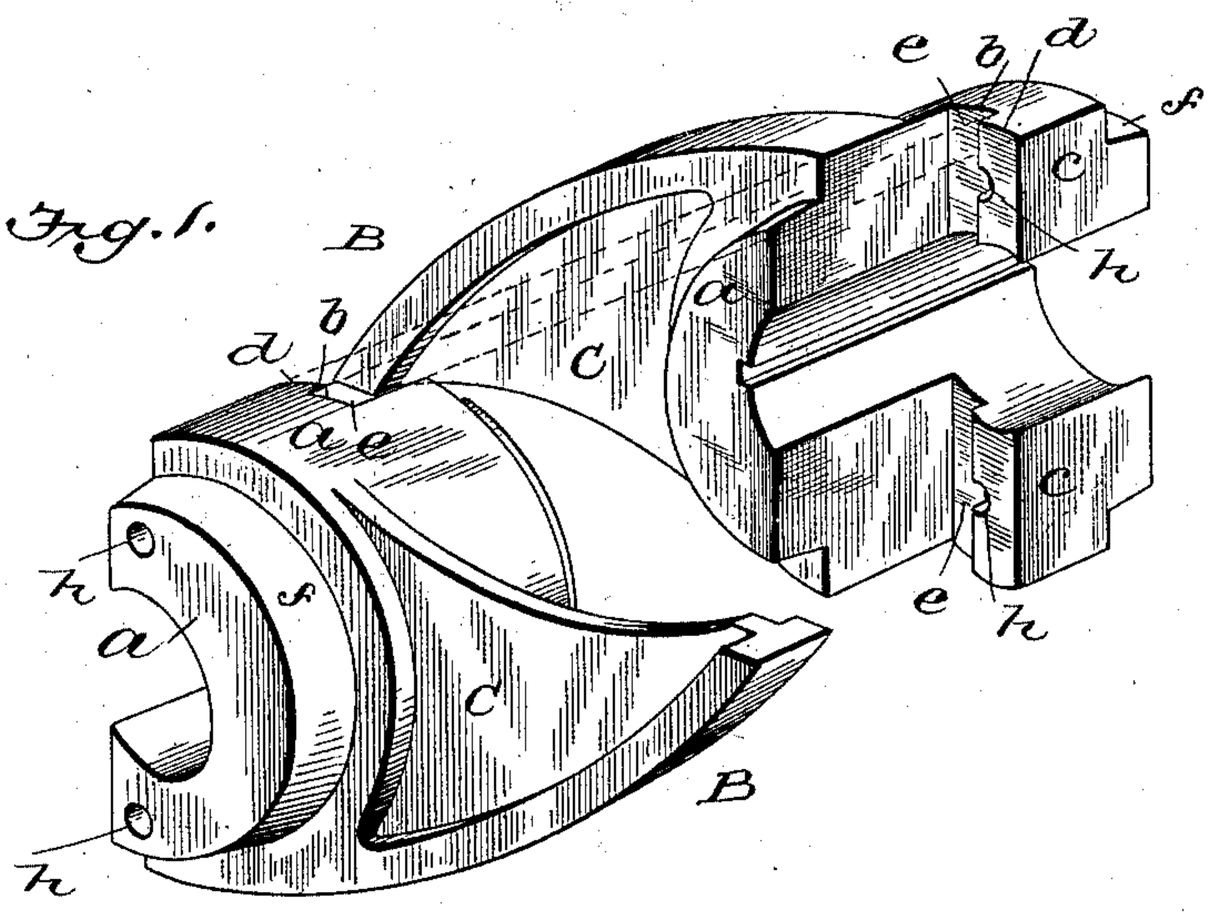


Fig. 2

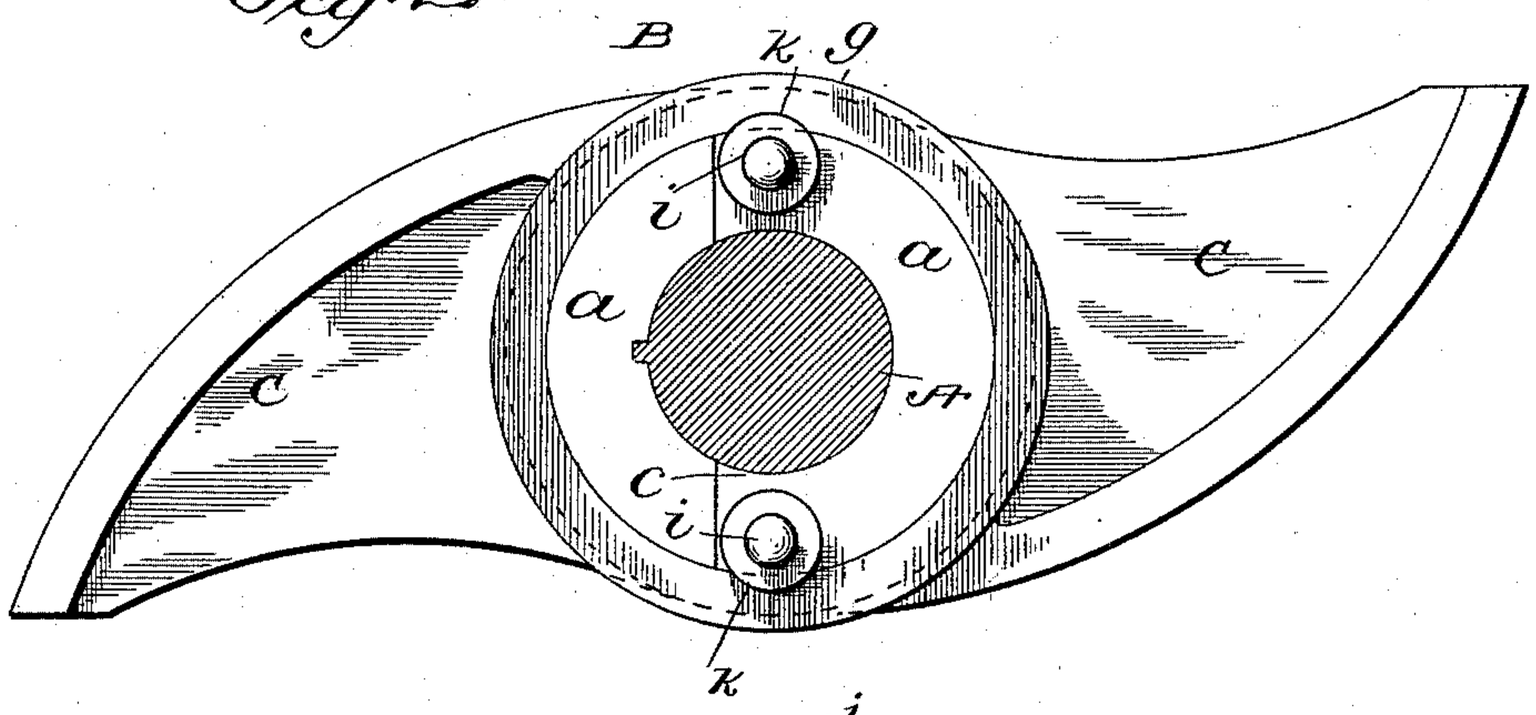
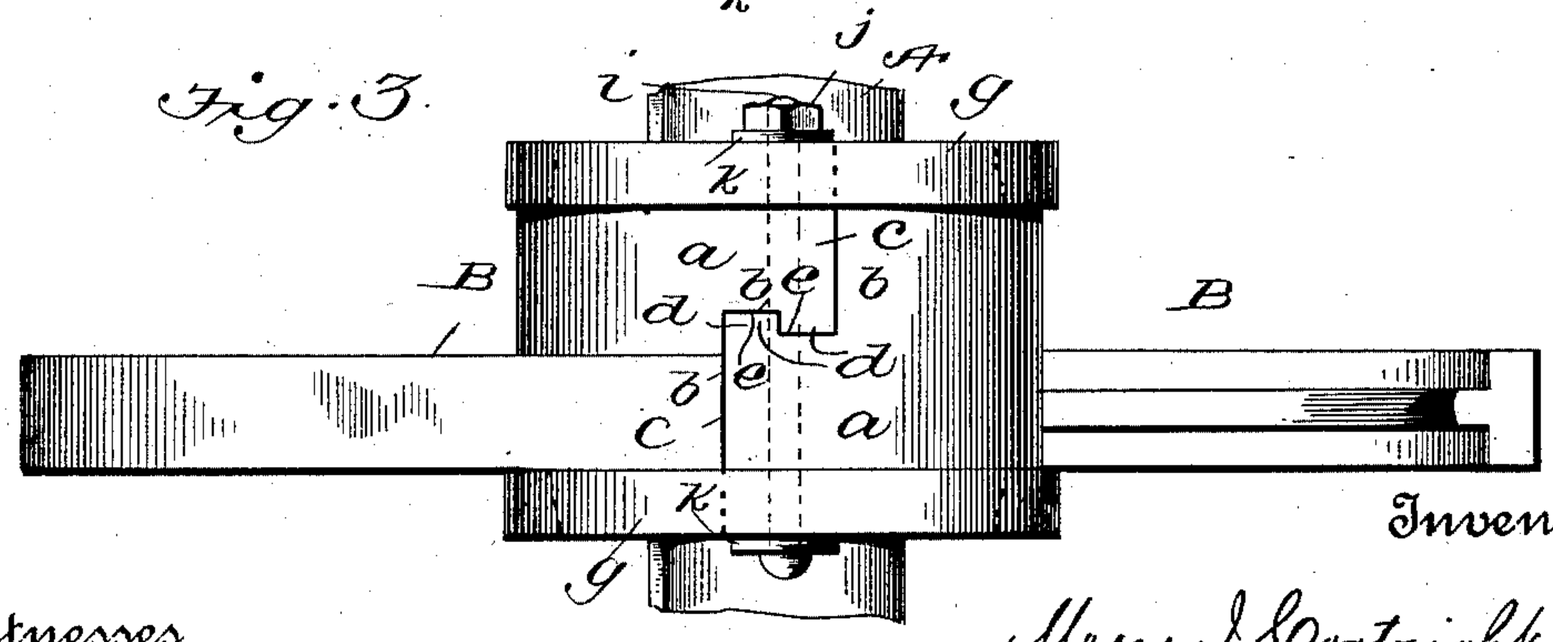


Fig. 3.



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SECTIONAL CAM FOR ORE-BATTERIES.

SPECIFICATION forming part of Letters Patent No. 522,880, dated July 10, 1894.

Application filed March 28, 1894. Serial No. 505,438. (No model.)

To all whom it may concern:

Be it known that I, MOSES I. CORTRIGHT, a citizen of the United States, residing at Port Byron, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Sectional Cams for Ore-Batteries or Stamp-Mills; and I do hereby 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 appertains to make and use the same.

This invention relates, generally, to cams and particularly to sectional or divided cams having two arms for operating the stamps of an ore battery or stamp mill, and it has for its object to provide a simple, durable, and comparatively inexpensive cam adapted to be easily and readily secured to and removed from a shaft when necessity arises without disturbing or in any manner interfering with the other cams mounted on the shaft, whereby a broken or damaged cam may be easily and expeditiously replaced with the least possible loss of time, and it consists, first, in providing the hub of a two part or split cam with lugs adapted, to interlock when brought together, and, second, in providing means for preventing the lateral movement of the parts from each other and for securely holding the parts rigidly together and in other details of construction and arrangement of parts as hereinafter more fully described and claimed.

In the accompanying drawings forming a part of this specification, Figure 1 is a perspective view of the cam showing its parts or halves separated and in position to be brought together; Fig. 2 an end view showing the cam complete and mounted on a shaft; and Fig. 3 a plan view of the cam.

Similar letters refer to similar parts throughout the several views.

In the drawings A represents a section of the cam shaft of an ore battery or stamp mill on which, in practice, a series of double armed cams are mounted at regular distances apart and arranged so as to strike the tappets of a series of stamp-stems and lift the stamps consecutively during the operation of the mill.

B represents my improved cam which is keyed on said shaft in the usual or any desired manner so as to secure it firmly in place.

The hub *a* of the cam is cast with the arms C and is divided longitudinally on a step-like line, *b*, to one side of the center of the same, the overlapping portions *c* of each half of the hub having the laterally projecting lugs *d* cast therewith at the end of the overlapping portions so as to leave a recess *e* between each lug and the body of the hub of a size to snugly receive the lug *d* on the opposite half of the hub when said halves are brought together. At each end the hub is reduced and tapered slightly, as at *f*, in order to receive thereon the rings or bands, *g*, as will be hereinafter described, and longitudinally extending bolt holes *h* are formed partly through each lug and the body of the hub through which bolts *i* are passed and secured by nuts *j* so as to fasten the respective halves of the hub firmly together at points at diametrically opposite sides of the shaft. The bands or rings *g*, are formed with a slightly tapering inner surface adapting them to be readily and snugly applied to the reduced and tapered ends of the hub in order to bind the respective halves of the ends tightly together and to the shaft A, and when so applied and the bolts *i* passed through the holes *h*, with metal washers *k* interposed at each end which overlap the rings or bands *g*, and the nuts *j* run on said bolts the whole will be securely held together and be at the same time easily and quickly separable when necessity arises. As will be observed the lugs *d* on each half of the hub interlock and fit snugly within the recesses *e* corresponding thereto thus forming a firm bearing for each half hub on the other half hub and preventing their separation after being placed on the shaft except by longitudinal or lateral movement from each other, even when not secured by the bands or rings, or the bolts, and when so secured together by the means described and mounted on the shaft any tendency to fly apart caused by centrifugal action will be counteracted by said lugs and bands as well as the bolts whose primary purpose is to hold the halves against lateral movement. Also it will be noticed that

greater strength is obtained by reason of the division of the hub at a point away from its longitudinal center and the line of direction which said division follows.

The bands or rings are arranged on the shaft prior to the setting up of the same and are not to be removed therefrom when replacing a broken or damaged cam.

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

1. A sectional cam, comprising two arms or sections each of which is formed with a half hub, which extends beyond the arms at each side, with an overlapping portion, and with laterally extending lugs on said overlapping portions, the lugs on each section being adapted to interlock with the lugs of the other section, in combination with bands or rings at each end thereof for securing said sections together, substantially as described.

2. A sectional cam, comprising two arms or sections each formed with a half hub having each of its ends tapered with an overlapping portion, and with lugs adapted to interlock, in combination with bands or rings for securing said sections together at each end and to the shaft, and bolts passing longitudinally through said hub-sections at diametrically opposite points, substantially as described.

3. A sectional cam, comprising two sections each formed with a half hub, an arm projecting from each half hub, an overlapping portion, and lugs adapted to interlock, in combination with bands or rings for securing said sections to each other at each end and to the shaft, bolts passing longitudinally through said half hubs, nuts for said bolts, and washers interposed between said nuts and bolt heads and the bands or rings, substantially as described.

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

MOSES I. CORTRIGHT.

Witnesses:
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