

(No Model.)

S. HARRIS.
DRUM FOR ELECTRIC CONTROLLERS.

No. 573,874.

Patented Dec. 29, 1896.

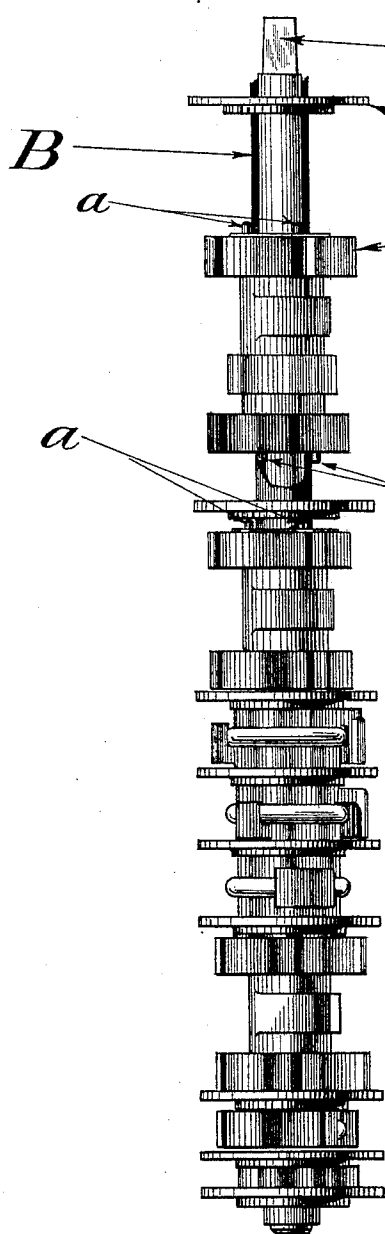


Fig. 1.

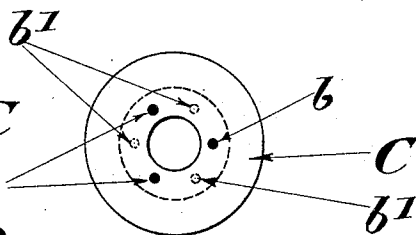


Fig. 2.

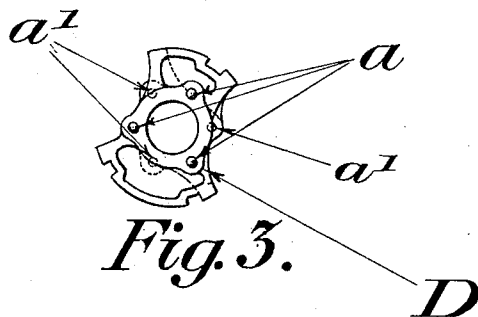


Fig. 3.

WITNESSES:
H. G. Jeff
Harry Hartwell

INVENTOR
Samuel Harris
BY
Richard Eyr
ATTORNEY.

UNITED STATES PATENT OFFICE.

SAMUEL HARRIS, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO THE
STEEL MOTOR COMPANY, OF SAME PLACE.

DRUM FOR ELECTRIC CONTROLLERS.

SPECIFICATION forming part of Letters Patent No. 573,874, dated December 29, 1896.

Application filed October 6, 1896. Serial No. 608,005. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL HARRIS, a citizen of the United States, residing at Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Drums for Electric Controllers, of which the following is a specification.

My invention relates to the construction of drums for electric controllers, particularly such controllers as are used on electric-railway cars, and has for its object such an improved arrangement of parts as to simplify construction, afford good insulation where needed, and allow the drum to be readily put together with each part thereof in its proper circumferential position in relation to the shaft of the drum.

Referring to the drawings, Figure 1 is a front view of a controller-drum in course of construction, said drum embodying the features of my invention. Fig. 2 is a top view of one of the insulating-disks, and Fig. 3 is a top view of one of the contact-rings.

A is the shaft of the drum and is adapted at its top to receive the operating-lever.

B is a tube made of insulating material. I prefer to make this tube of rubber and mold it to the shaft.

C is one of the insulating-disks, usually made of vulcabeston, and D is one of the contact-rings, usually comprising an iron casting to which copper contact-pieces are secured. Extending upwardly from the contact-rings are the pins *a a*, and extending downwardly from the contact-rings are the pins *a' a'*. Extending upwardly into the disks C C are the

recesses *b' b'*, adapted to receive the pins *a a*, and extending downwardly into said disks are the recesses *b b*, adapted to receive the pins *a' a'*.

I have not shown the detailed construction or shape of the contact-rings and insulating-disks, nor have I shown the clamps which hold the parts in their proper longitudinal positions, as these features are well known to the art and form no part of my invention.

It is understood that it is within the scope of my invention to attach the pins or similar devices to the insulating-disks, placing the recesses in the contact-rings, if I so desire.

What I claim, and desire to protect by Letters Patent, is—

1. In a drum for electric controllers, the use of pins extending upwardly and downwardly from the contact-rings of the drum, and recesses on the top and on the bottom of the insulating-disks of said drum, said recesses being adapted to receive said pins.

2. In a drum for electric controllers, in combination, the shaft of the drum, an insulating-tube secured about said shaft, contact-rings and insulating-disks encircling said tube, said rings having pins extending upwardly and downwardly therefrom, which pins are adapted to enter recesses placed on the lower and upper sides of the disks.

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

SAML. HARRIS.

Witnesses:

JOHN H. KENNEDY,
H. W. SMITH.