

(No Model.)

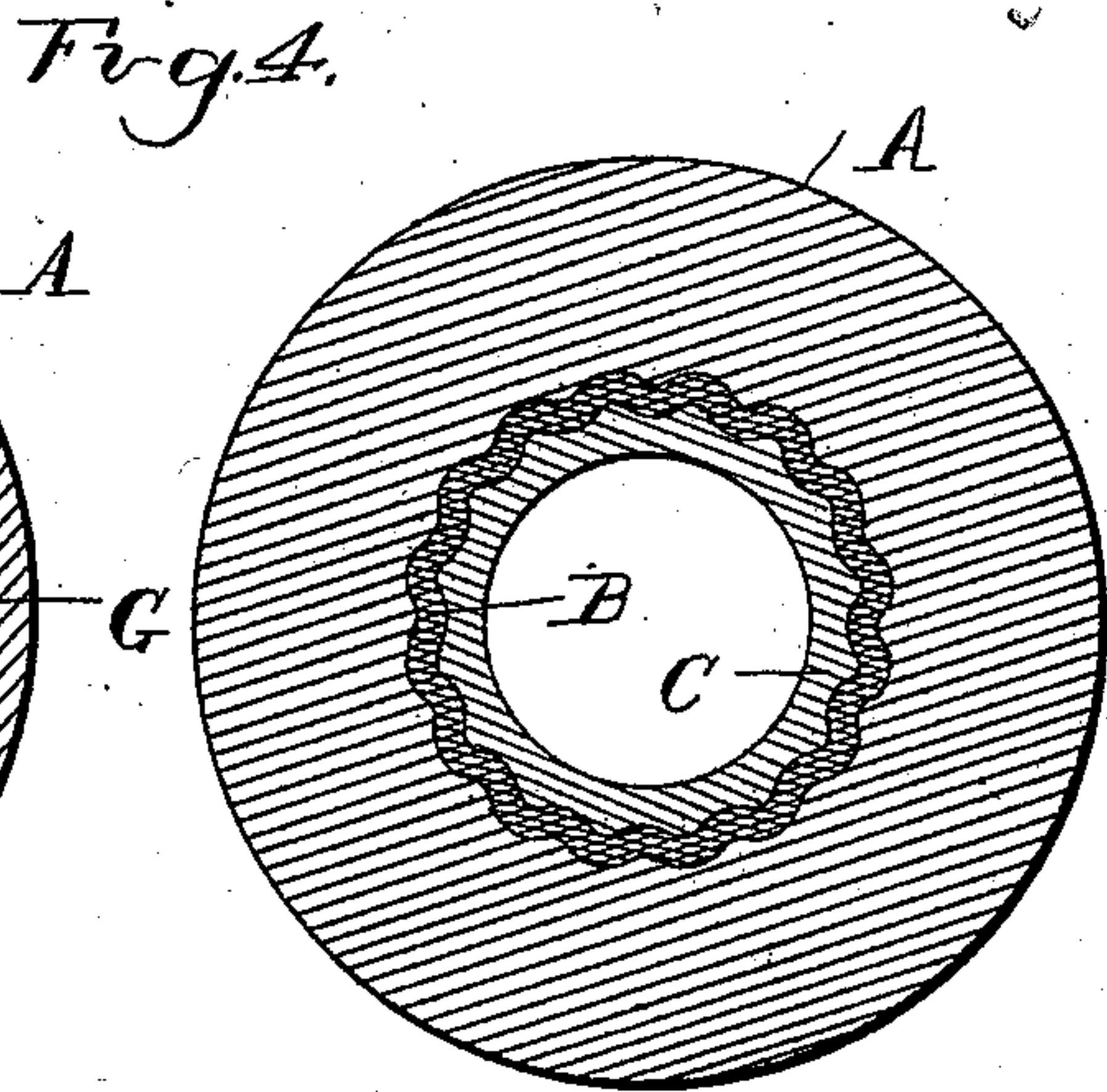
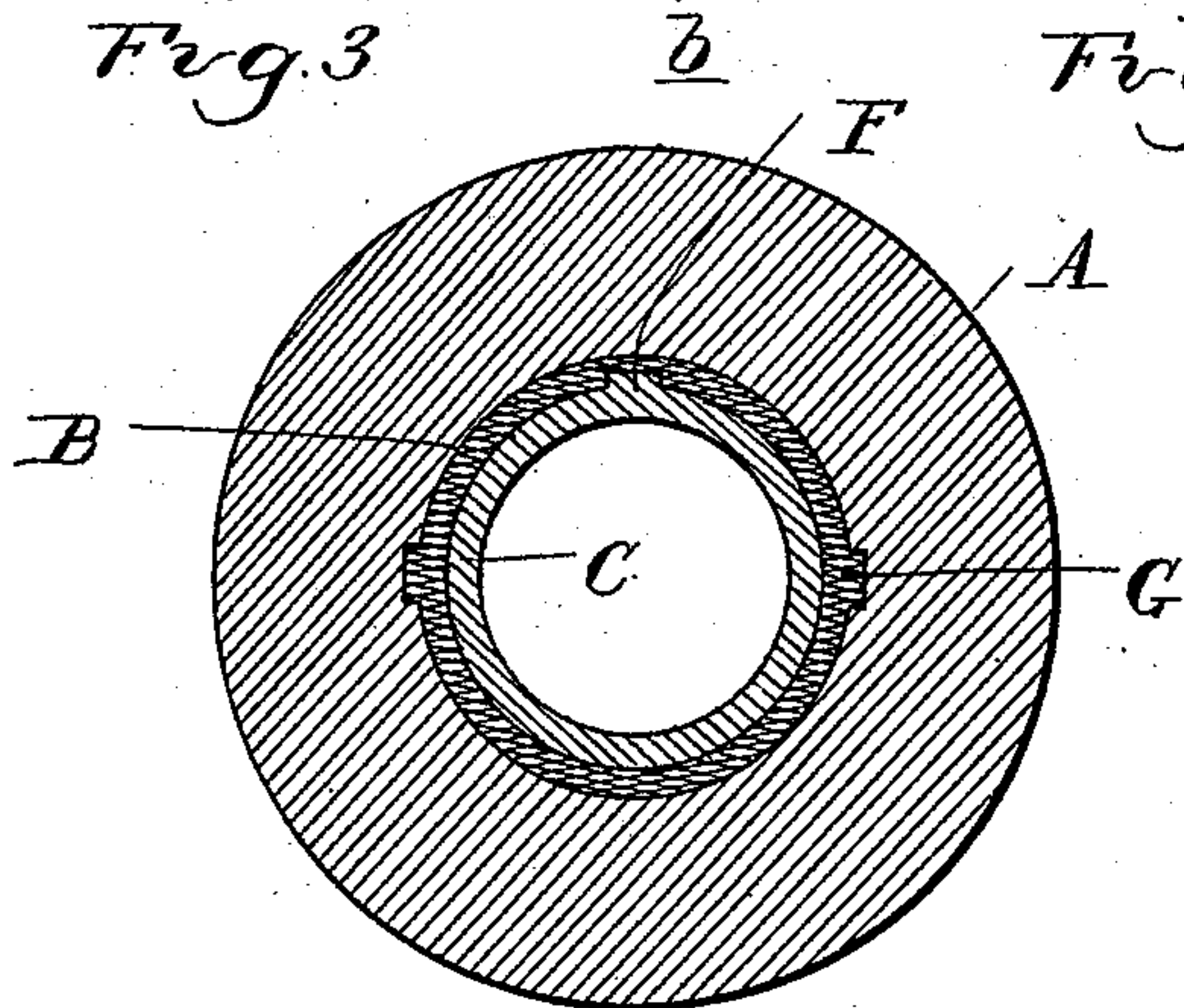
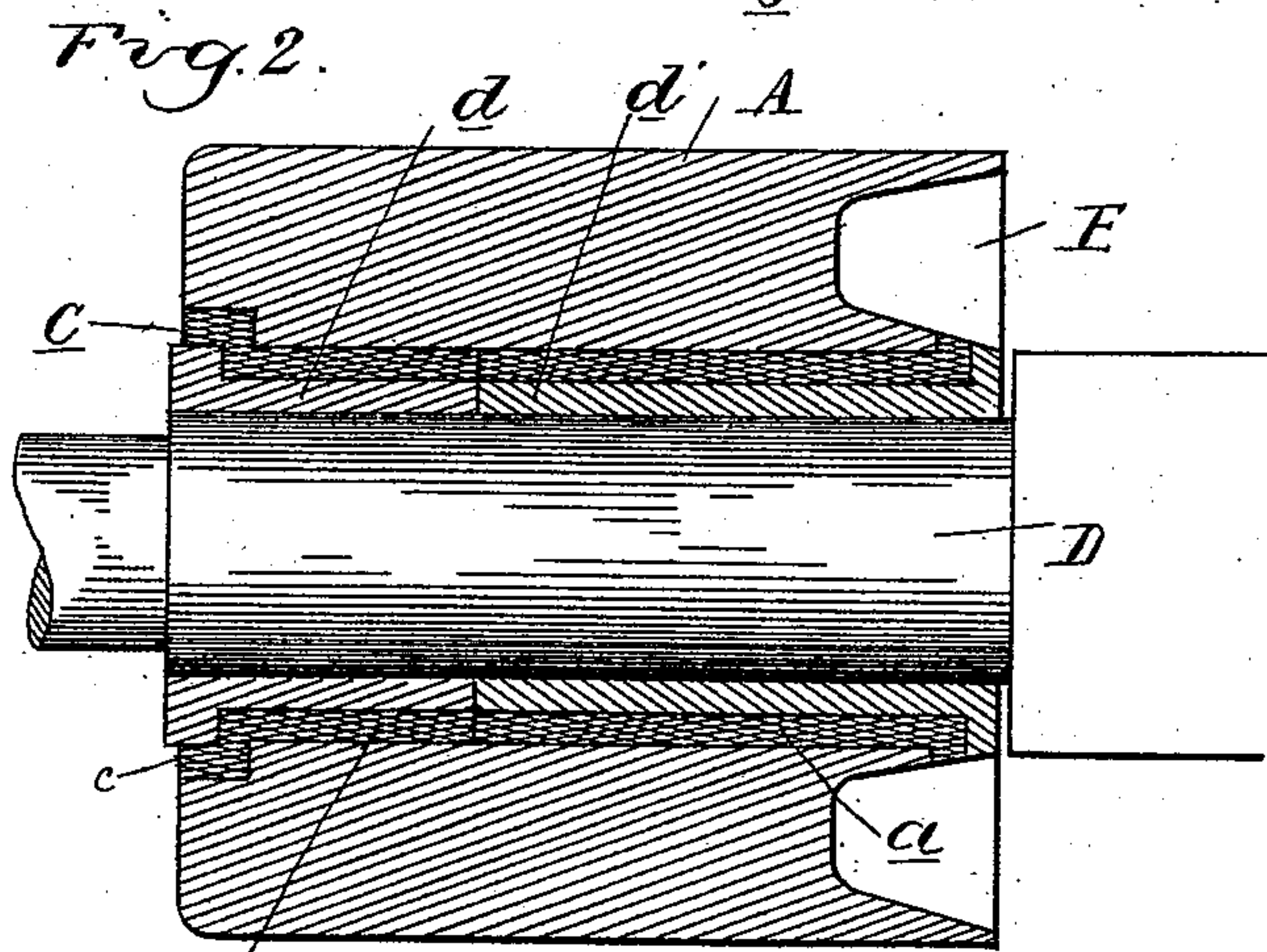
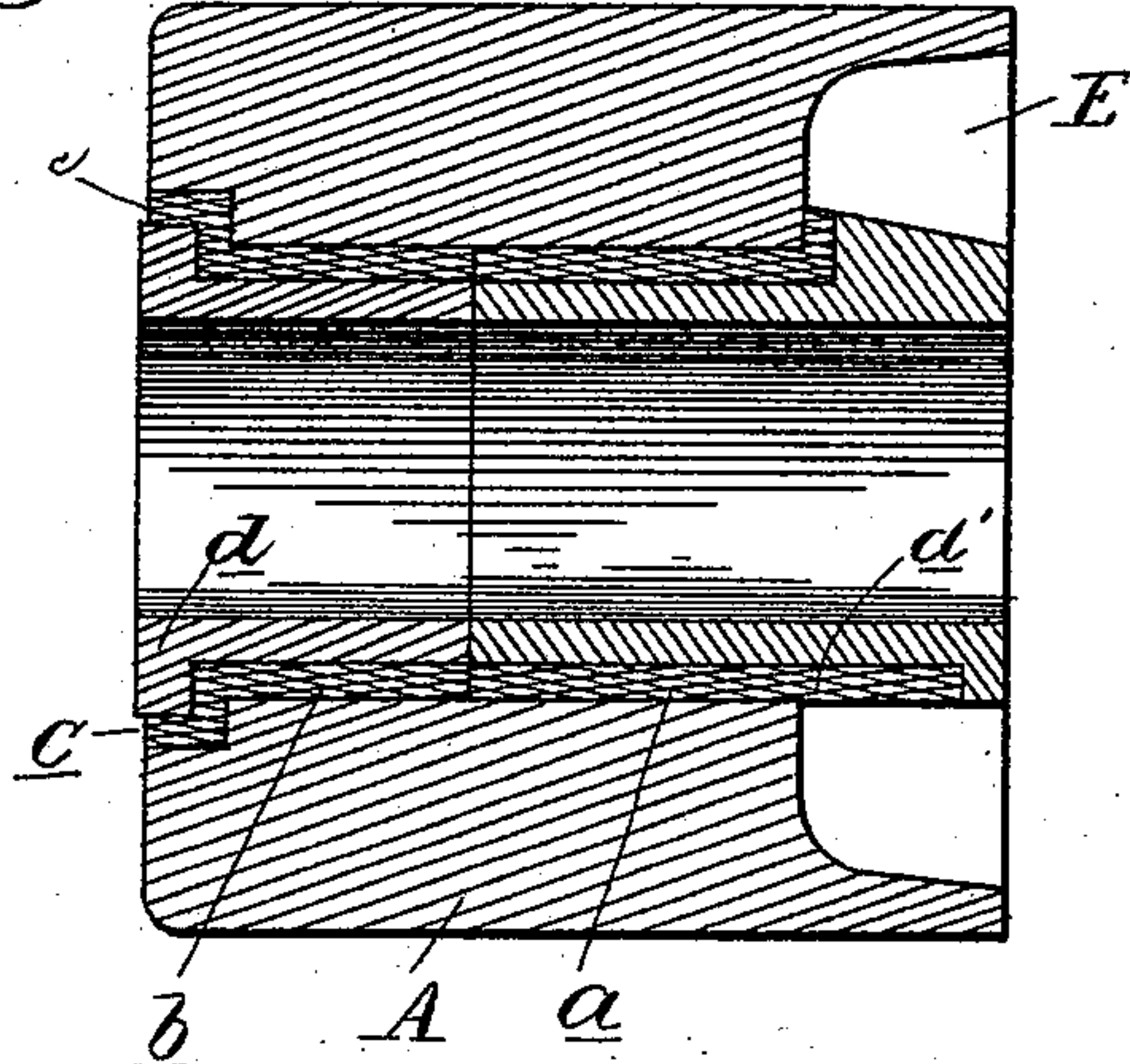
C. ROBERTS, Dec'd.

J. B. & G. A. ROBERTS, C. B. TUCKER & S. H. ROBERTS, Executors.

CAR WHEEL.

No. 528,278.

Fig. 1. Patented Oct. 30, 1894.



James B. Roberts, George A. Roberts,
Carrie B. Tucker & Samuel H. Roberts,
Executors of Cyrus Roberts. Inventor.

Witnesses
A. L. Kabbie
W. B. Ogerty.

By *Thos. S. Macquer* Attys.

UNITED STATES PATENT OFFICE.

JAMES B. ROBERTS, GEORGE A. ROBERTS, AND CARRIE B. TUCKER, OF
THREE RIVERS, MICHIGAN, AND SAMUEL H. ROBERTS, OF DENVER,
COLORADO, EXECUTORS OF CYRUS ROBERTS, DECEASED.

CAR-WHEEL.

SPECIFICATION forming part of Letters Patent No. 528,278, dated October 30, 1894.

Application filed July 14, 1893. Serial No. 480,549. (No model.)

To all whom it may concern:

Be it known that CYRUS ROBERTS, a citizen of the United States, residing at Three Rivers, in the county of St. Joseph and State of Michigan, having invented certain new and useful Improvements in Car-Wheels, and being now deceased, we, JAMES B. ROBERTS, GEORGE A. ROBERTS, and CARRIE B. TUCKER, of Three Rivers, St. Joseph county, Michigan, and SAMUEL H. ROBERTS, of Denver, Arapahoe county, State of Colorado, the executors of the last will and testament of said CYRUS ROBERTS, deceased, do hereby present the following specification of said invention, reference being had to the accompanying drawings.

The invention consists in the peculiar construction of a car wheel with an insulating sleeve in the hub, whereby in using a hand car on a road using an electric block system, the signals will not be operated by the hand cars.

The invention further consists in the peculiar construction of the sleeve and of a metallic bushing fitted within the sleeve and forming the bearing for the journal, all as more fully hereinafter described.

In the drawings, Figures 1 and 2 are horizontal sections through the hub of a wheel embodying the invention in slightly modified forms. Fig. 3 is a section on line xx in Fig. 1. Fig. 4 is a similar section showing a slightly modified form.

In using hand-cars on the roads upon which the electric block signaling system is used it often misleads the trainmen if a hand car is used which will throw the signal.

In order to prevent the throwing of the signal the circuit between the wheels on opposite rails must be broken. To break this circuit a sleeve of insulating material is placed within the hub A. The form preferably used is shown in Figs. 1, 2 and 3, in which the sleeve B is made of two parts $a b$ meeting centrally of the hub and having at their outer edges, flanges c . The sections of the sleeve thus formed are forced in by hydraulic pressure

from opposite sides of the hub and the bushing likewise made in sections $d d'$ is forced into the sleeve forming the structure, as shown in Fig. 2. This is well adapted to break the circuit, especially if the inner face of the hub is recessed, as shown at E for the engagement of a dust guard or flange.

Fig. 2 shows a modification slightly different from Fig. 1.

To prevent the sleeve from turning in the hub it is either keyed into the hub or an interengagement of the parts is otherwise effected, as for instance by serrating the inner face of the hub and the outer face of the sleeve, as shown in Fig. 4. The bushing and the sleeve are also locked together by keying or interengaging the parts in a similar manner, as shown in Figs. 3 and 4.

In Fig. 3 is shown a key F on the bushing engaging a corresponding keyway in the sleeve and keys G on the sleeve engaging corresponding keyways in the hub.

In Fig. 4 is shown the meeting edges of the sleeve and hub and sleeve and bushing with interengaging serrations.

What is claimed as the invention is—

In a car wheel, the combination with the apertured hub, of a sleeve of insulating material consisting of two sections $a b$, their inner ends engaging and having lateral flanges c at their ends, and an inner metallic bushing formed in two sections $d d'$, their inner ends engaging and having lateral flanges engaging over the lateral flanges of the insulating material, substantially as described.

In testimony whereof we affix our signatures in the presence of two witnesses.

JAMES B. ROBERTS,
GEORGE A. ROBERTS,
CARRIE B. TUCKER,
SAMUEL H. ROBERTS,
Executors of Cyrus Roberts, deceased.

Witnesses:

J. E. BUNN,
GEO. KELLER.