

No. 850,258.

PATENTED APR. 16, 1907.

L. M. SCHMIDT.  
CIRCUIT DETECTING DEVICE.  
APPLICATION FILED OCT. 8, 1904.

Fig. 1.

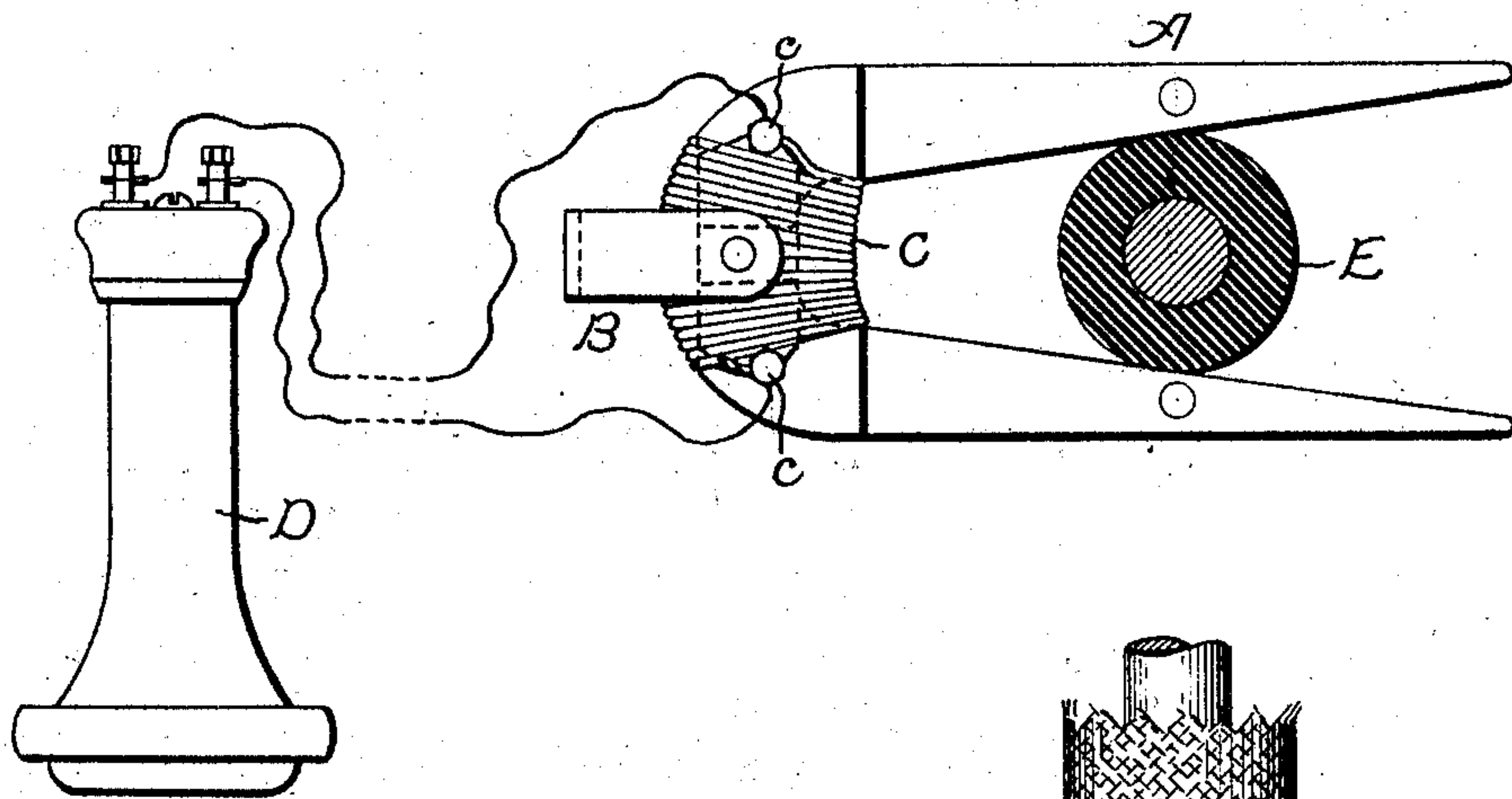
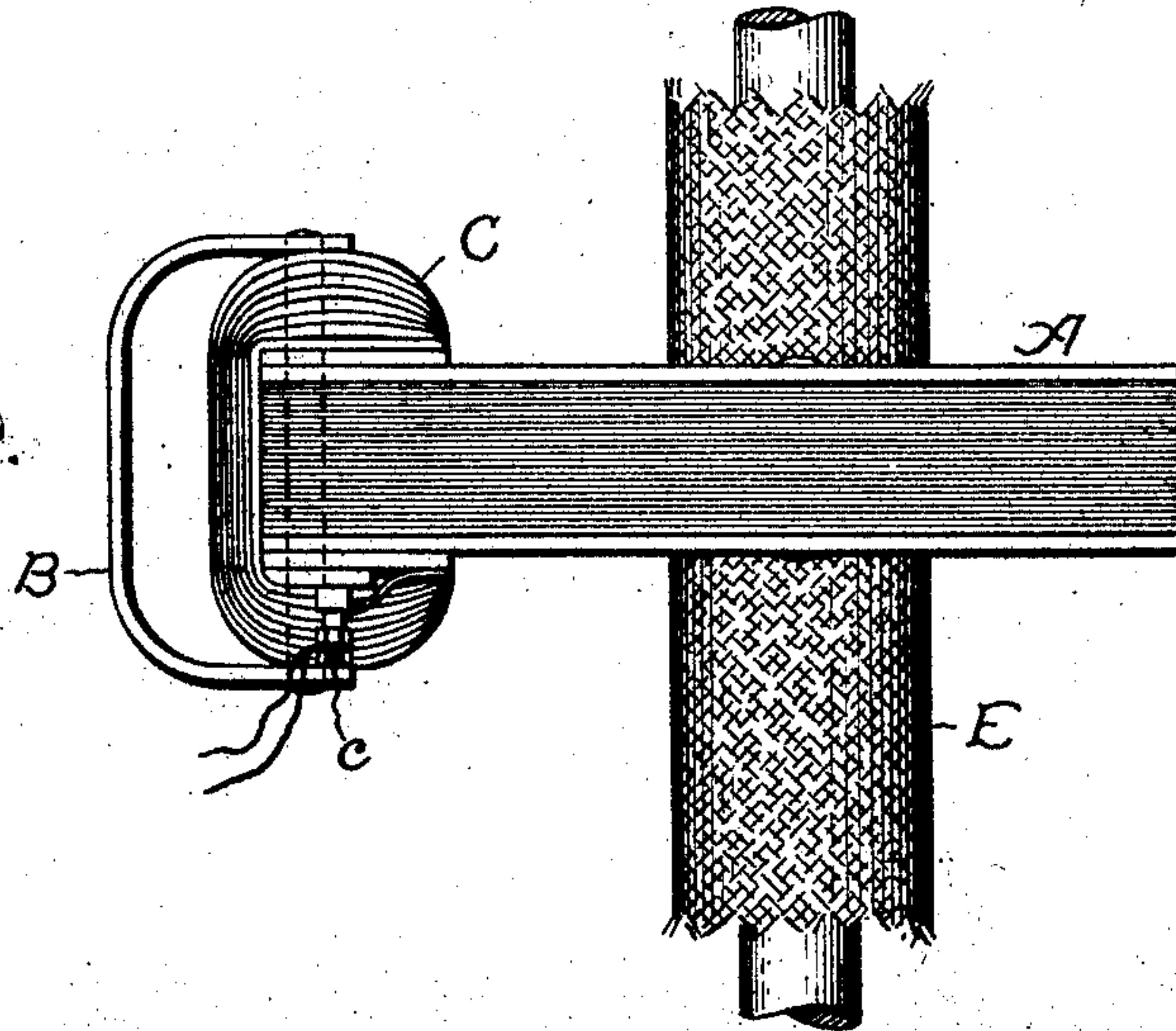


Fig. 2.



Witnesses:

Marcus L. Byng.  
Allen W. Ford

Inventor:

Louis M. Schmidt,  
by *Alfred B. Davis*  
Att'y.

# UNITED STATES PATENT OFFICE.

LOUIS M. SCHMIDT, OF LYNN, MASSACHUSETTS, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

## CIRCUIT-DETECTING DEVICE.

No. 850,258.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed October 8, 1904. Serial No. 227,645.

*To all whom it may concern:*

Be it known that I, LOUIS M. SCHMIDT, a citizen of the United States, residing at Lynn, county of Essex, State of Massachusetts, have invented certain new and useful Improvements in Circuit-Detecting Devices, of which the following is a specification.

My invention relates to electrical testing devices; and its object is to provide a device for detecting the presence of alternating current in conductors which is cheap, compact, and readily applied to conductors of various sizes.

My invention will best be understood by reference to the accompanying drawings, in which—

Figure 1 shows a side elevation of the device constructed in accordance with my invention, and Fig. 2 shows a plan view of the same.

In the drawings, A represents a laminated U-shaped core the inner sides of which are sloped at an angle to each other, as shown, so as to receive conductors of various sizes. The core A is provided with a handle B and carries at the base of the U a coil C, provided with the terminals *c c*. To these terminals

may be connected any suitable electroresponsive device D—as, for instance, a telephone-receiver. When the U-shaped core is slipped over the conductor E, as shown, an alternating flux will be produced in the core if the conductor is carrying alternating current, and this flux will produce in the coil C an alternating current, which may be detected by means of the telephone-receiver or other electrical device, such as a voltmeter.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

In a current-detecting device, a laminated U-shaped core having its inner sides diverging from the base of the U to accommodate conductors of different sizes, a handle attached to the base of said core, a winding carried by said core at the base of the U, and an electroresponsive device connected in series with said winding.

In witness whereof I have hereunto set my hand this 5th day of October, 1904.

LOUIS M. SCHMIDT.

Witnesses:

JOHN A. McMANUS, Jr.,  
DUGALD McK. McKILLOP.