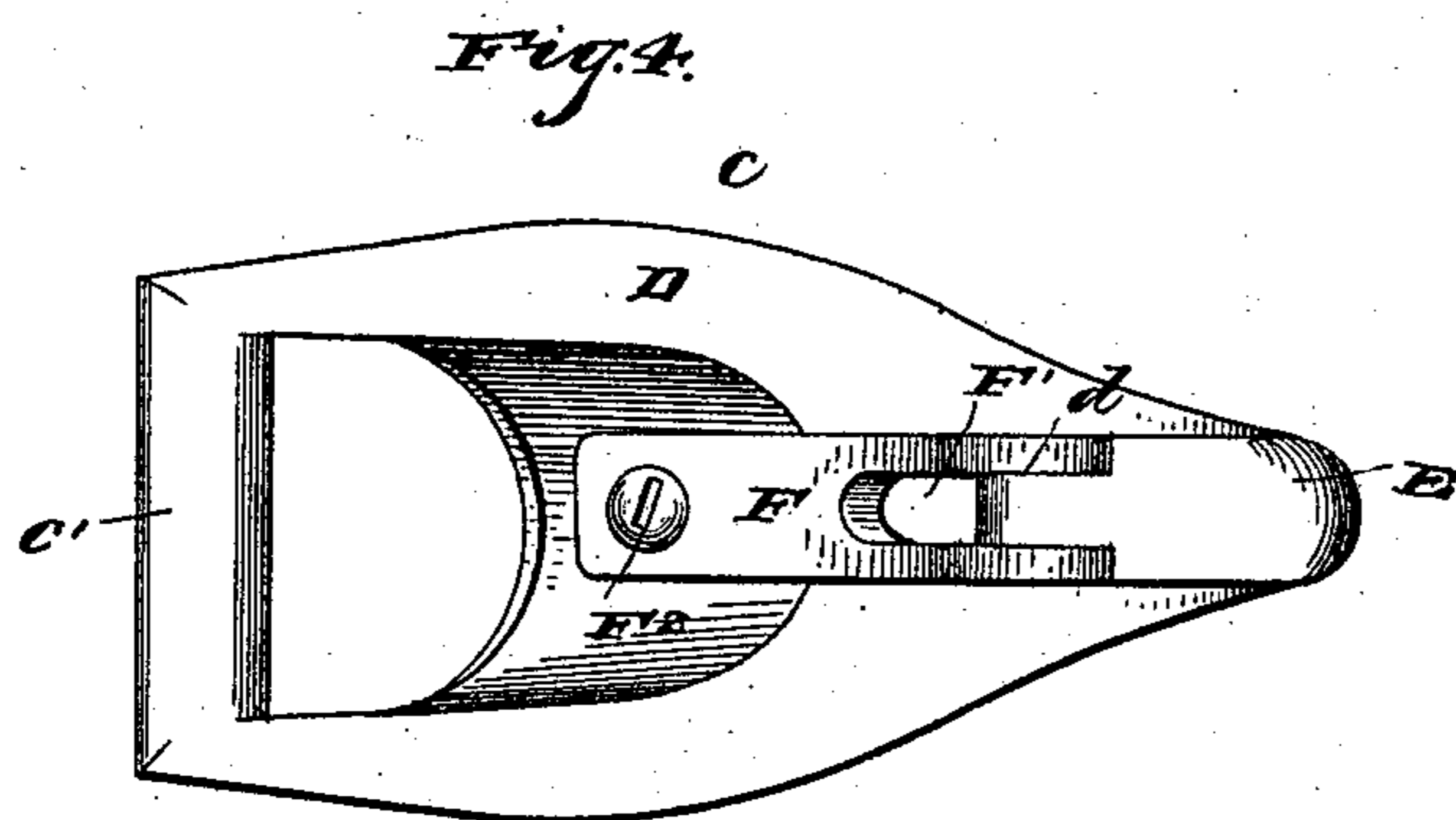
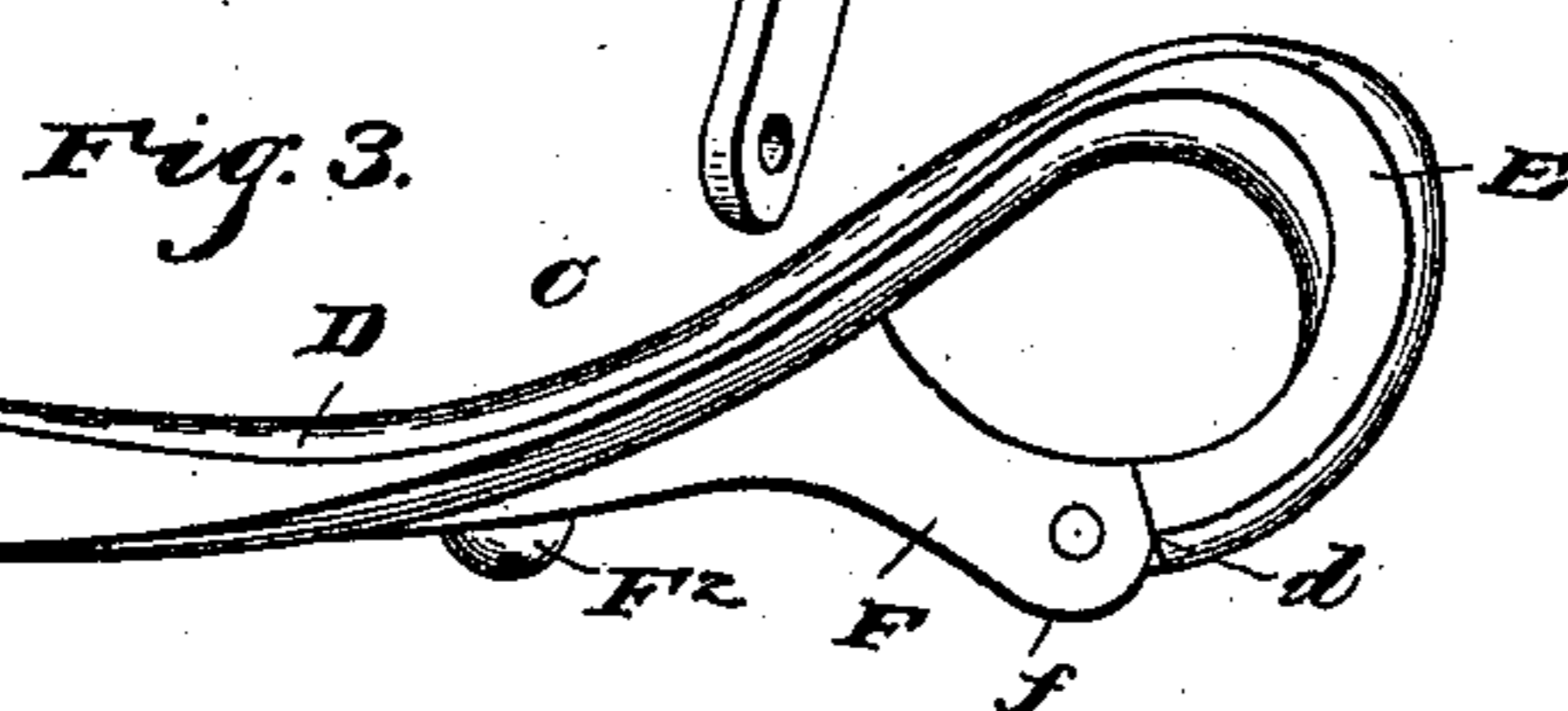
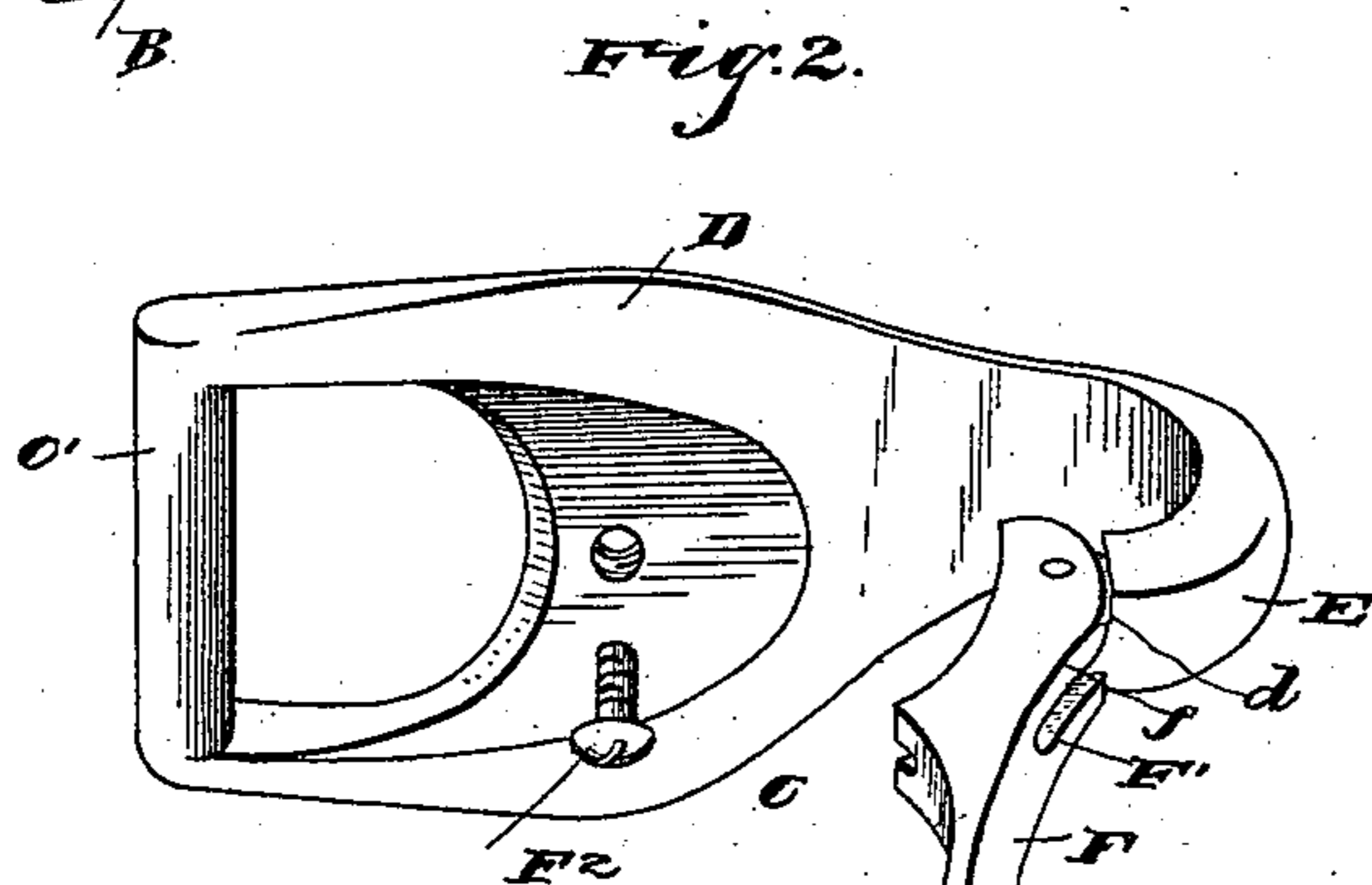
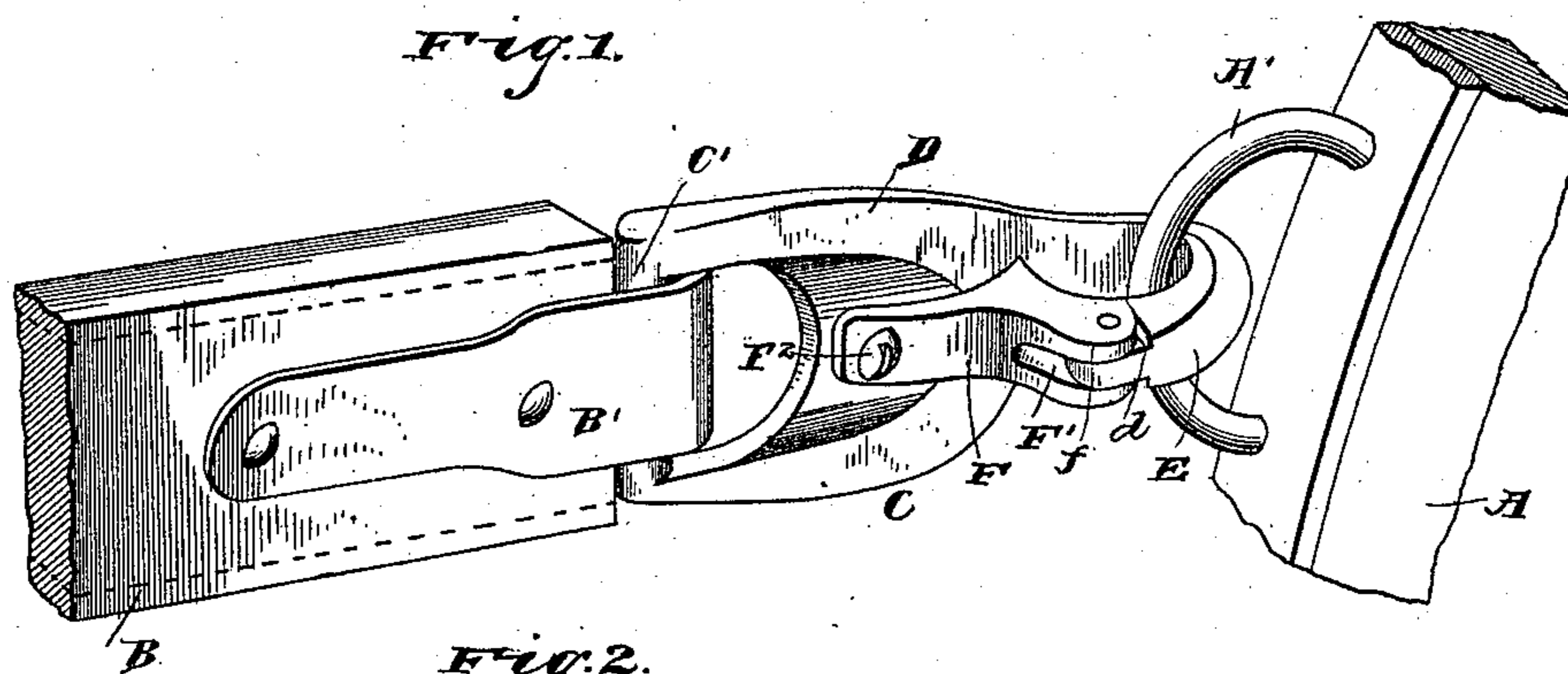


(No Model.)

W. E. KING.  
HAME TUG.

No. 486,379

Patented Nov. 15, 1892.



Witnesses

B. S. Ober

Inventor

William E. King.

By his Attorneys,

Chas. B. Hyer

Chas. B. Hyer & Co.

# UNITED STATES PATENT OFFICE.

WILLIAM E. KING, OF NEWARK, NEW JERSEY.

## HAME-TUG.

SPECIFICATION forming part of Letters Patent No. 486,379, dated November 15, 1892.

Application filed February 26, 1892. Serial No. 422,871. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM E. KING, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented a new and useful Connecting Attachment for Hame-Tugs, of which the following is a specification.

My invention relates to new and useful improvements in connecting attachments for hame-tugs; and it consists in the construction and arrangement of the parts thereof, as will be more fully hereinafter described and claimed.

The object of my invention is to provide an attachment whereby the end of a tug may be readily attached to and detached from a hame by means of the formation of an eye having one side or wall thereof hinged and adapted to be opened and closed and when closed to be permanently attached until it is desired to interchange the connection of the ends of the tugs, when said hinged side or wall of the eye can be readily opened.

Other advantages will appear in the description and claim hereinafter set forth.

Referring to the drawings, Figure 1 is a perspective view of my improved attachment shown connected to a portion of a tug and attached to an eye on a hame. Fig. 2 is a similar view of the device, showing the hinged side or wall of the eye in open position. Fig. 3 is an edge plan view looking toward the rear of the device and illustrating the curved outline or construction of the device. Fig. 4 is a plan view of the device.

In the drawings, A designates a portion of a hame having an eye A'.

B designates a portion of a tug having a metallic clip B' to form a loop and bearing for the bar C' of the attachment C. The bar C' forms one wall of a D-eye in the end of the said attachment. The construction thus far explained is well known in the art; and my improvement consists of the said attachment C, comprising a broadened plate D, which is of a concavo-convex form to embrace or freely have bearing around the parts of the hame, and thereby remove the strain which would be brought to bear laterally upon said hame by the straight contour of this class of devices, which is commonly known in the art. By means of this curved construc-

tion, as set forth, it will be observed that the draft-line is centralized on the point of connection of the attachment of the eye with the hame and thence carried directly to the tug, and rubbing or pressing inward of said attachment is avoided. The end of the attachment is formed with the hook E, which is extended over a front tapered portion of the plate D and its end recessed, as at d, and provided with an eye for the reception of a pin-  
55 tle or rivet. A tongue F is provided and formed with a bifurcated end F', embracing and pivotally connected to the recessed end of said hook E. As shown at f, the curve of the bifurcated portion or end F' of said tongue is continued regularly with the curve of the hook E when said tongue is fastened down against the plate D, as shown in Fig. 1, there-  
60 by forming a smooth eye for engagement with the eye A' of the hame. The said tongue in rear of said bifurcated portion thereof has its one side curved or concaved to fit snugly against the curved adjacent surface of the plate D and is formed with a screw-threaded opening or hole at the end thereof, which aligns with a similar opening or hole in said plate D to removably receive a screw F<sup>2</sup>.

In applying my attachment to a hame the screw F<sup>2</sup> is removed and the tongue F opened and passed through the eye A' of the hame until said eye is seated in the hook E. The said tongue F is then turned down against the plate D and the screw F<sup>2</sup> inserted in position to lock said tongue against said plate D, and thereby securely connect the attachment with the hame. When it is desired to disconnect the tug from the hame, the tongue F may be opened and said disconnection be attained, as will be readily understood. The advantages of this construction over devices of like character heretofore made consist in the saving of labor and expense in the formation of the hook E. By hinging a portion of said hook and having it in the form of said tongue F a continuous construction or extension of said hook E is avoided and an equally strong and durable device is provided—that is to say, to construct a broad plate after the manner of the plate B, reduce the outer end thereof and form the hook E, and continue said hook backward for the purpose of attachment to said plate would make an expensive  
100

and complex structure, and, in some respects, could not be practically carried out. By the construction I have described I provide a broad concavo-convex plate to serve for the  
5 purpose hereinbefore set forth, and employ a tongue pivotally connected to a hook at the outer reduced end of said plate, which conforms in contour to the surface of said plate, so that it may be firmly secured thereagainst,  
10 and which may be readily detached, as hereinbefore set forth.

The bar C' is enlarged or thickened and gradually tapers down to the thin portion of the attachment C, and the portion of the clip  
15 B' which surrounds said bar C is also increased in thickness to make it more durable; but the particular object is to avoid the thick end of the hame-tug when the bar C is surrounded by leather, so that when this enlarged part  
20 comes in contact with the collar where the collar is large or against the horse, as may be the case when the collar is small or light, the damage done is readily apparent. By making the said clip increased in thickness at the  
25 point of its greatest wear only the disadvantage in the respect noted is avoided. The hook E is also increased in thickness for the

purpose of durability and wearing qualifications.

Having thus described my invention, what I claim as new is— 30

A hame-tug-connecting attachment comprising a broad concavo-convex plate having a bar with the metal thereof adjacent thereto increased in thickness and a hook on the opposite end of said plate bent backward from the plane of attachment of said plate and having a recessed end; a tongue having a bifurcated end embracing and pivotally connected to said recessed end of the hook and  
40 provided with an under concave side at the free end thereof to bear on the outer convex surface of said plate and formed with a screw-hole aligning with a similar hole in said plate to receive an attaching-screw and adapted to  
45 receive a metallic clip on the bar of said plate, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM E. KING.

Witnesses:

CHARLES A. SLACK,  
WILLIAM TERHUNE.