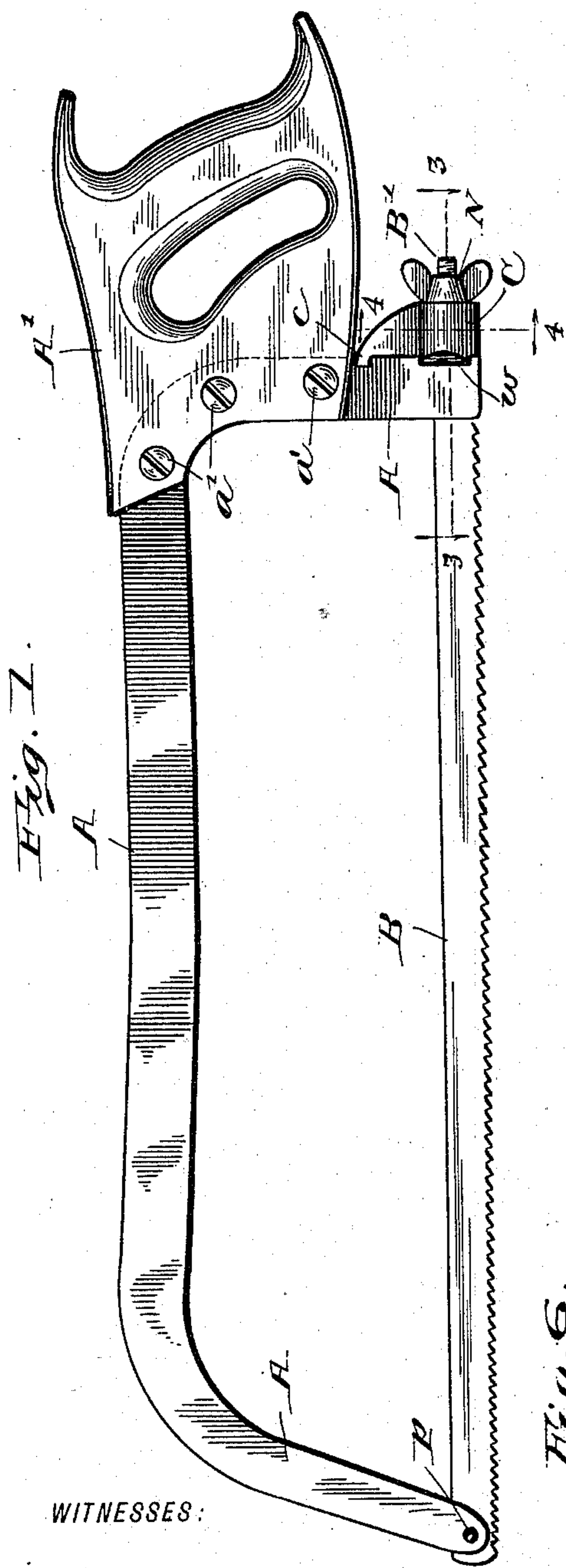


(No Model.)

G. MEYER.  
HANDSAW.

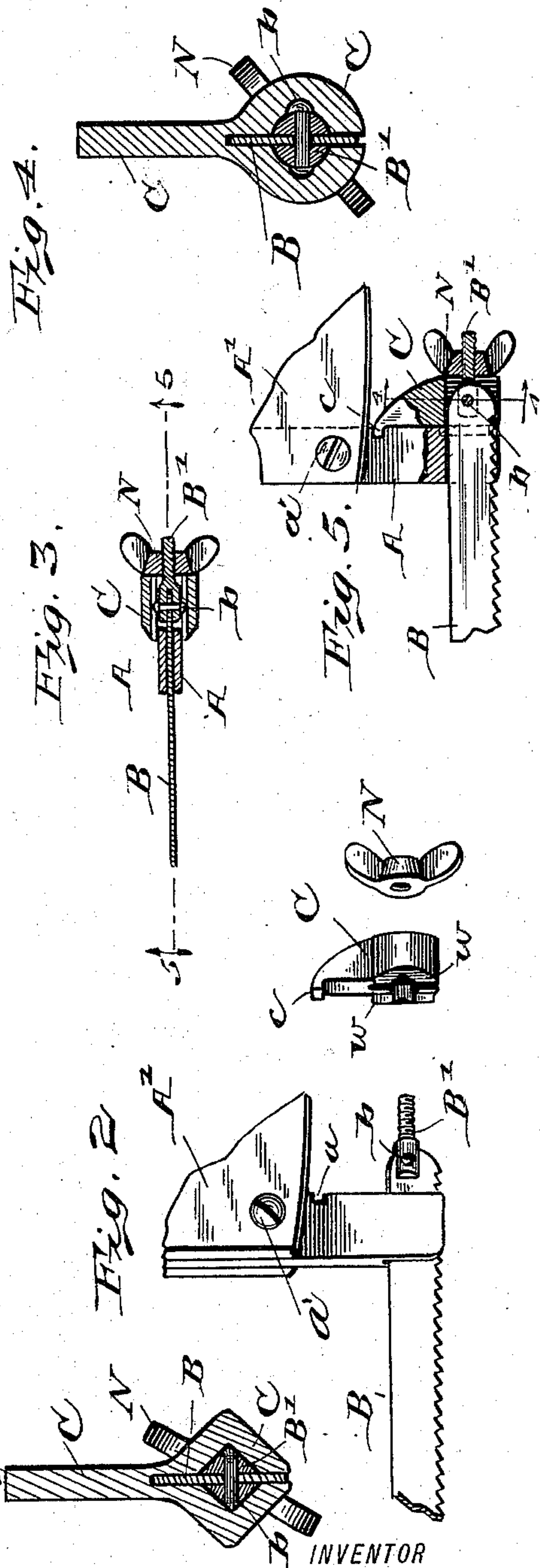
No. 573,893.

Patented Dec. 29, 1896.

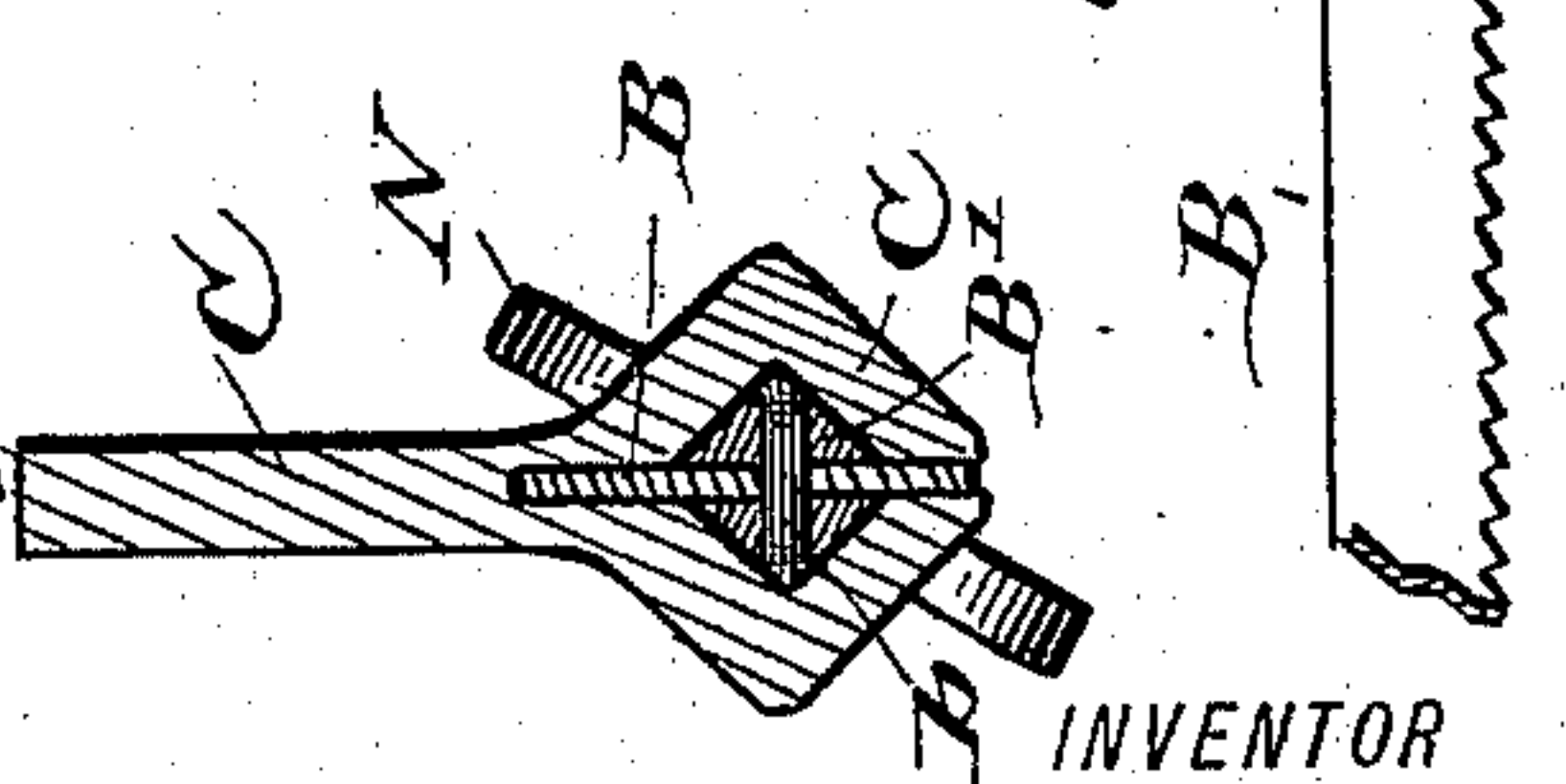


WITNESSES:

*H. P. Mealy*  
*J. A. Walsh*



*Fig. 3.*



*George Meyer,*  
BY  
*Chester Bradford,*  
ATTORNEY.



# UNITED STATES PATENT OFFICE.

GEORGE MEYER, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE E. C. ATKINS & COMPANY, OF SAME PLACE.

## HANDSAW.

SPECIFICATION forming part of Letters Patent No. 573,893, dated December 29, 1896.

Application filed February 25, 1896. Serial No. 580,668. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE MEYER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Handsaws, of which the following is a specification.

The object of my said invention is to improve the construction of that class of saws known as "bow-saws," which are used for a variety of purposes, but which are perhaps best known as "butchers'" saws; and said invention relates especially to the detachable fastening and straining device whereby the blade and frame are connected together and the proper tension applied to the blade.

Referring to the accompanying drawings, which are made a part hereof and on which similar letters of reference indicate similar parts, Figure 1 is a side elevation of a bow-saw provided with fastening devices embodying my said invention; Fig. 2, a fragmentary perspective view of the lower corner of the frame and the adjacent portion of the saw-blade with the fastening and straining device removed therefrom, thus showing the several parts separate from each other; Fig. 3, a horizontal sectional view on the dotted line 3 3 in Fig. 1; Fig. 4, a transverse sectional view, on an enlarged scale, on the dotted line 4 4 in Fig. 1; Fig. 5, a longitudinal vertical sectional view on the dotted line 5 5 in Fig. 3; and Fig. 6, a view similar to Fig. 4, but showing the parts in somewhat different form.

In said drawings the portions marked A represent the bow or frame of the saw, B the saw-blade, and C the fastening device.

The frame or bow A, as well as the handle A', attached thereto, is or may be in most particulars of an ordinary construction. It is slitted at the rear end to receive the saw-blade and has a notch *a* to receive a corresponding point *c* on the device C, as shown most plainly in Fig. 2. This bow or frame is all in one piece and is usually formed of spring metal for the purpose of effectually straining the saw. At the extreme point it is slitted and provided with a pin by which the point of the saw is connected thereto. The handle is secured thereto by screws *a'* in an ordinary manner.

The blade B is stretched between the two

ends of the frame A, as shown in Fig. 1. On its rear end it is provided with a screw-threaded extension B', which is slitted and passed over its end and there secured by a pin or rivet *b*. In the construction shown the ends of this pin or rivet are allowed to project for a purpose which will be presently explained. Said extension B' is shown in the principal views as round in cross-section throughout its length, but that portion which is housed within the fastening device C may obviously be rectangular, if desired, as shown in Fig. 6, or such other shape as is convenient, the only essential being in this particular that it shall be prevented from revolving in said device.

The fastening device C is provided with a projection *c*, which enters the notch *a* in the frame A and is also perforated longitudinally to receive the screw-threaded extension B' on the blade B. It has wings *w* on its face, which extend out and embrace the adjacent portion of the frame A when the parts are assembled. These wings insure that the parts shall be held into proper relation, while the projection *c* thereon prevents them from being disengaged.

As shown in Figs. 2, 3, and 4, the ends or heads of the pins or rivets *b* project outwardly, and corresponding grooves are formed in the interior surface of the part C to receive said heads or ends, and thus the parts are prevented from turning in relation to each other.

An equivalent but rather more expensive construction is illustrated in Fig. 6, where the perforation is shown as rectangular, and the screw-threaded extension B' is also shown as rectangular for that portion which is attached immediately to the saw. Any other shape which would prevent a rotary movement of one part in relation to the other would, of course, be an equivalent.

The parts are assembled by inserting the pin *p* through the frame A and saw B at the point, and then slipping the blade B up into the slot formed to receive it in the rear end of the frame A, then slipping the fastening device C over the end of the saw-blade and its screw-threaded extension B', so that the point *c* and flanges *w* shall engage with the adjacent portion of the frame, and finally applying the thumb-nut N. Said thumb-nut serves to force



the parts tightly together, and also to strain the saw-blade to the tension desired. In removing the saw-blade it is only necessary to loosen the thumb-nut until the point *c* will slip out of the notch *a* in the frame A, when the blade can be swung outwardly on the pivot-pin *p* and thus detached. The engaging formation of the exterior of the extension B' and the interior of the fastening device C, as before stated, prevents the rotation of one of these parts relatively to the other, and consequently prevents any twisting of the saw-blade. As the attaching devices are thus entirely outside the frame, the slot in the frame to receive the saw at the end is of substantially the same width as the plate of which the saw is made, which thus fits therein snugly and is supported from twisting in use.

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

A bow-saw consisting of the bow-shaped frame, a handle on one end thereof, a notch in the outside edge of said end, at a point some

distance back from its extremity, both ends of said bow being provided with a narrow slot adapted to receive the ends of the saw, said saw mounted in said slots and secured by a pivot at one end, and at its other end extending through the slot to a point outside the frame and there provided with a screw-threaded shank, the fastening device, C, formed with a perforation to receive the outer end of the saw and the shank, and with an upwardly-projecting arm having a transverse projection on its end which engages with said notch in the frame, and also with forwardly-projecting lips which embrace said frame below said notch, and the thumb-nut on the outer end of said screw-threaded shank, all substantially as shown and described.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 21st day of February, A. D. 1896.

GEORGE MEYER. [L. S.]

Witnesses:

JAMES A. WALSH,  
H. D. NEALY.