

E. T. C. LUTTON.
MANUFACTURE OF YARN.

No. 60,530.

Patented Dec. 18, 1866.

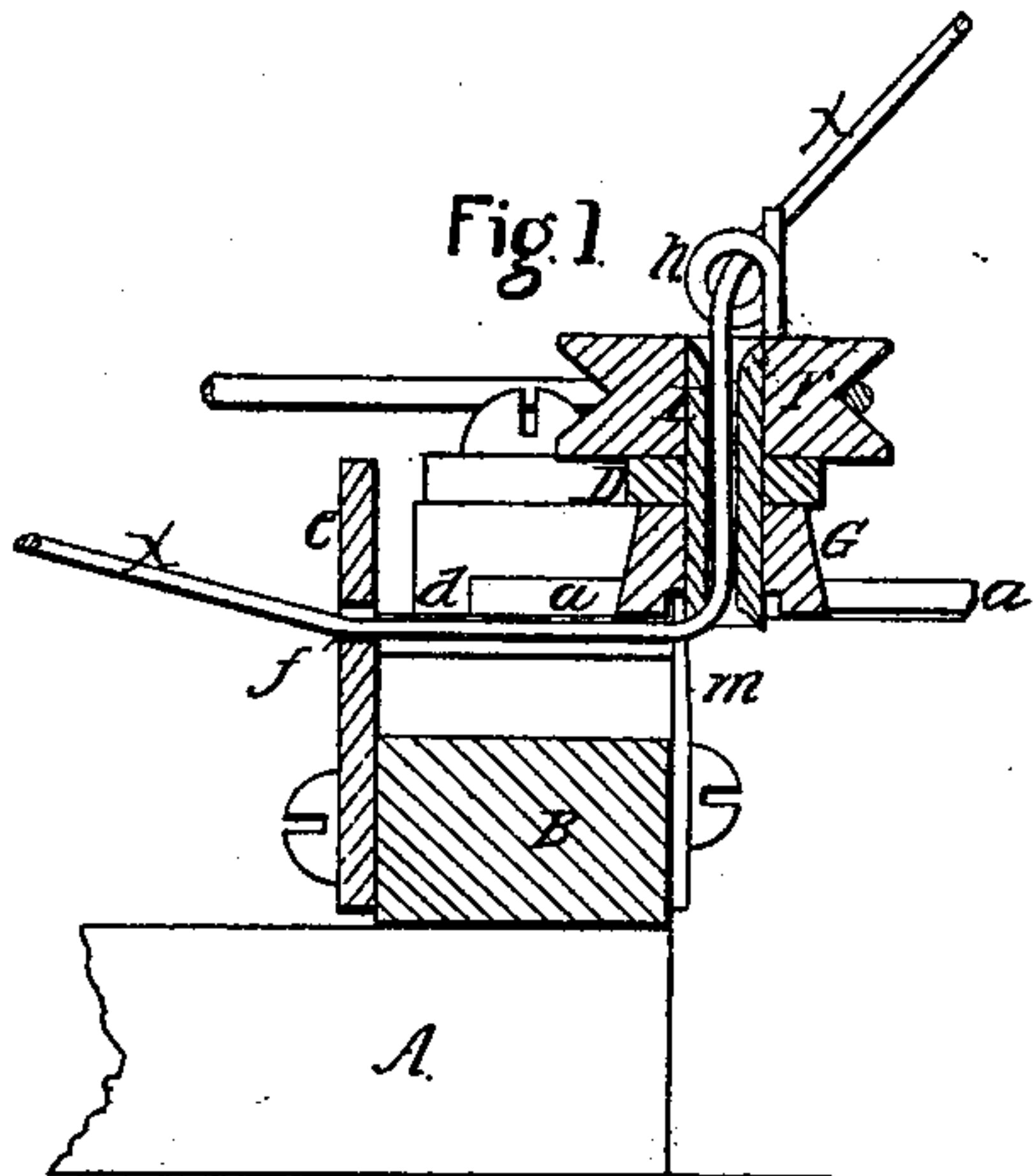


Fig. 1.

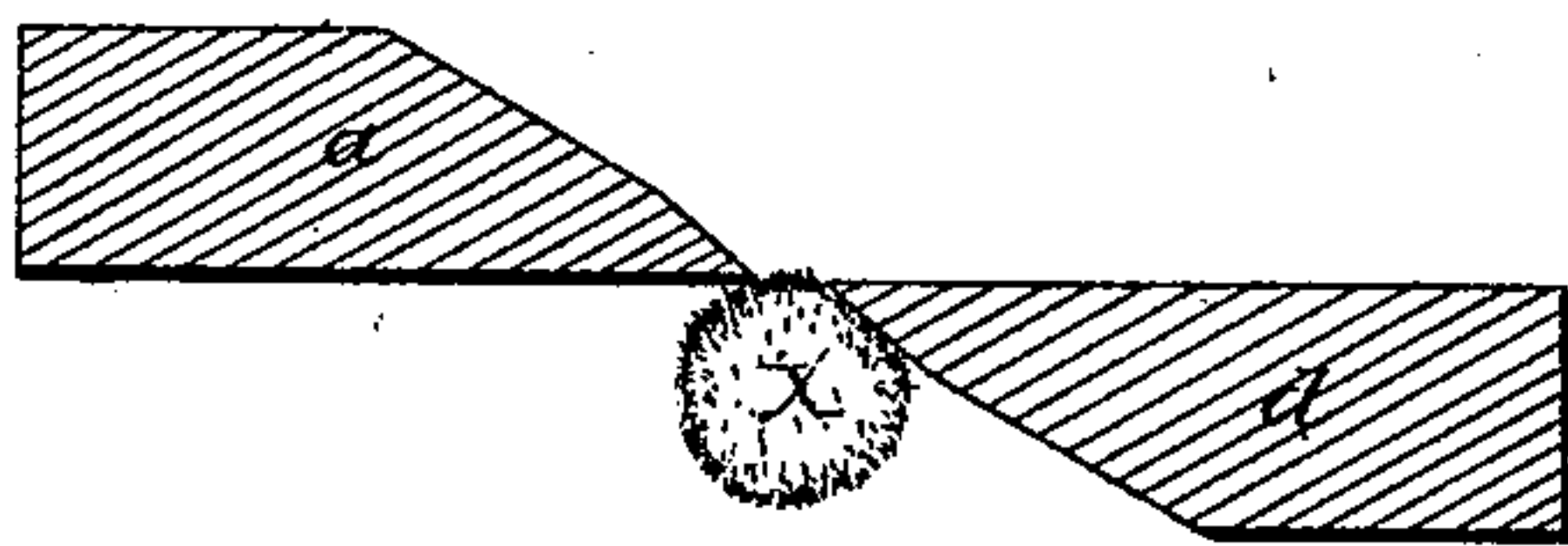
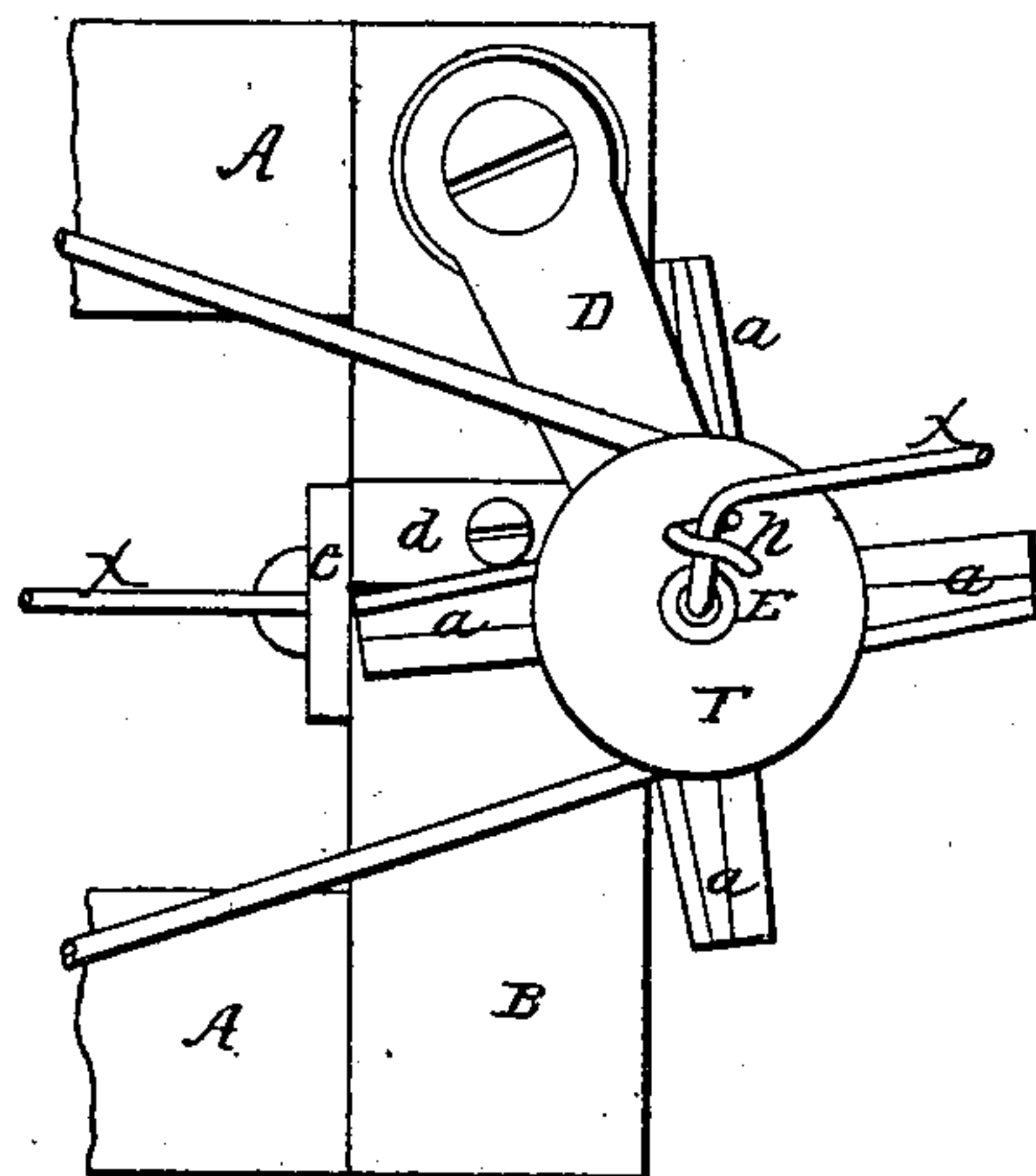


Fig. 2.



Witnesses:
Wm Albert Steel
Wm Botham

Inventor:
E. T. C. Lutton
By his Atty
H. H. H. H.

United States Patent Office.

IMPROVEMENT IN MANUFACTURE OF YARN.

EDWARD T. C. LUTTON, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 60,530, dated December 18, 1866.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, EDWARD T. C. LUTTON, of Philadelphia, Pennsylvania, have invented an Improvement in Woollen Yarns, or in yarns composed partly of wool; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention consists of yarn from which the superfluous projecting fibres have been sheared, as described hereafter, so as to render it equal in appearance and finish to the finest German zephyr.

Mechanism, which I will now proceed to describe briefly, as it forms the subject of a separate application for a patent, may be used in shearing the yarn.

Figure 1 represents a vertical section of this mechanism.

Figure 2, a plan view: and

Figure 3, an enlarged sectional view of the shearing knives.

The yarn, *z*, passes from a reel and through an eye or slot in a plate, *e*, secured to a suitable frame; thence through a tubular spindle, *E*, which revolves in a bracket, *D*, and to which is secured a hub, *G*, and from the latter project one or more cutting blades, *a*, so arranged as to revolve in close contact with, but not to bear hard against, a stationary blade, *d*, secured to the frame. The blades *e* and *d* are bevelled, and thus reduced to a sharp cutting edge, as seen in the enlarged view, fig. 3. The yarn passes from the tubular spindle through an eye, *h*, secured to a pulley, *F*, on the said spindle, and thence to an adjacent winding-reel. As the eye *h* is situated at a distance from the centre of the spindle, a temporary twist must be imparted to the yarn as it traverses in the direction of the arrow. The yarn is guided in a direction parallel or thereabouts with the cutting edge of the stationary knife *d*, and slightly below the same, as seen in fig. 3, so that as the yarn traverses and revolves in front of the cutting edge the projecting superfluous fibres are severed by the combined action of the said edge and those of the revolving knives. A proper tension is imparted to the yarn by any suitable devices.

The yarn, even if made either wholly or partly of comparatively coarse wool, is when thus shorn equal, as regards smoothness and appearance, to the finest German zephyr.

I claim as my invention, and desire to secure by Letters Patent, as a new article of manufacture and commerce—

Yarn from the entire surface of which the superfluous projecting fibres have been sheared, for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD T. C. LUTTON.

Witnesses:

H. HOWSON,

W. J. R. DELANY.