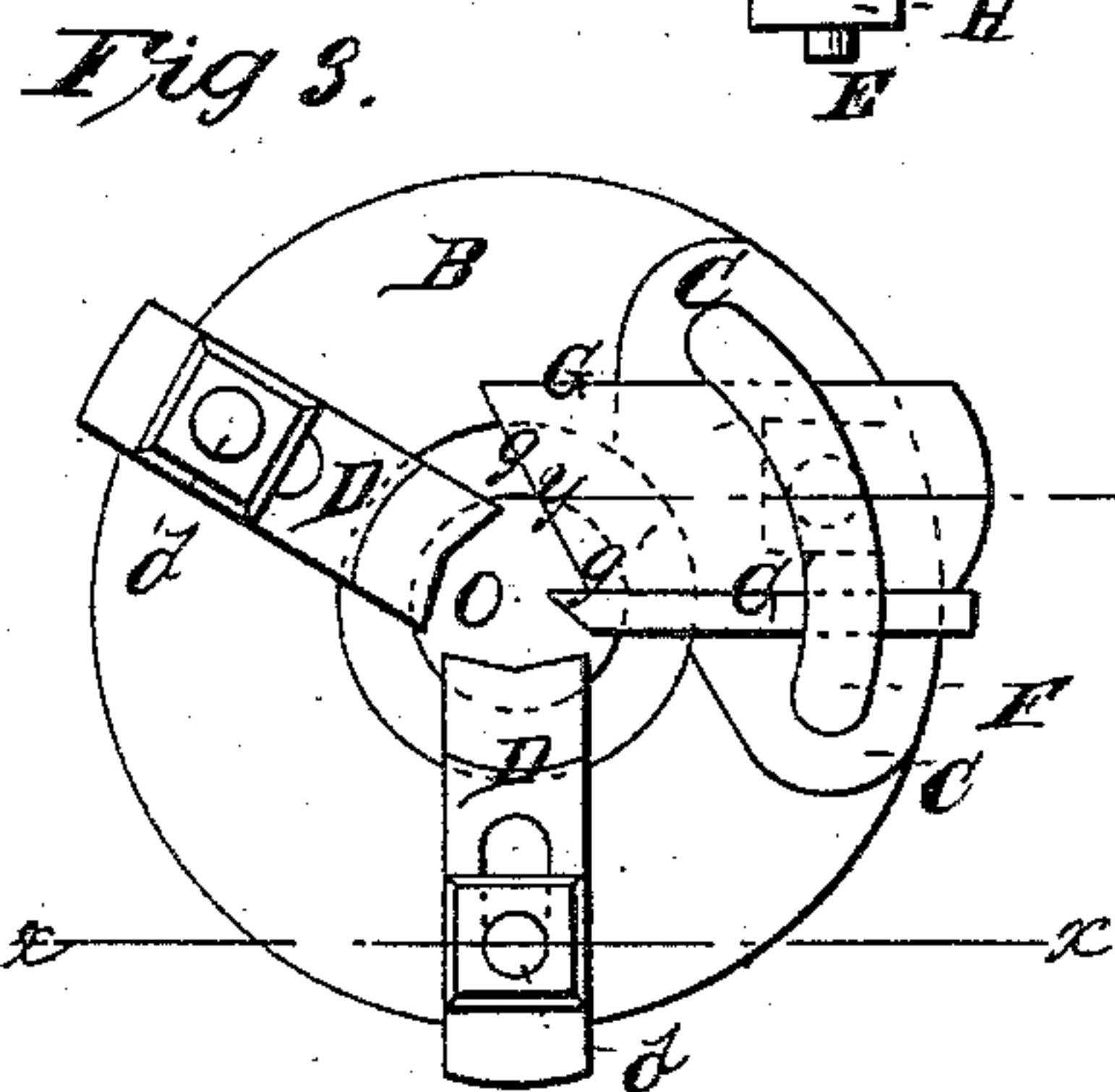
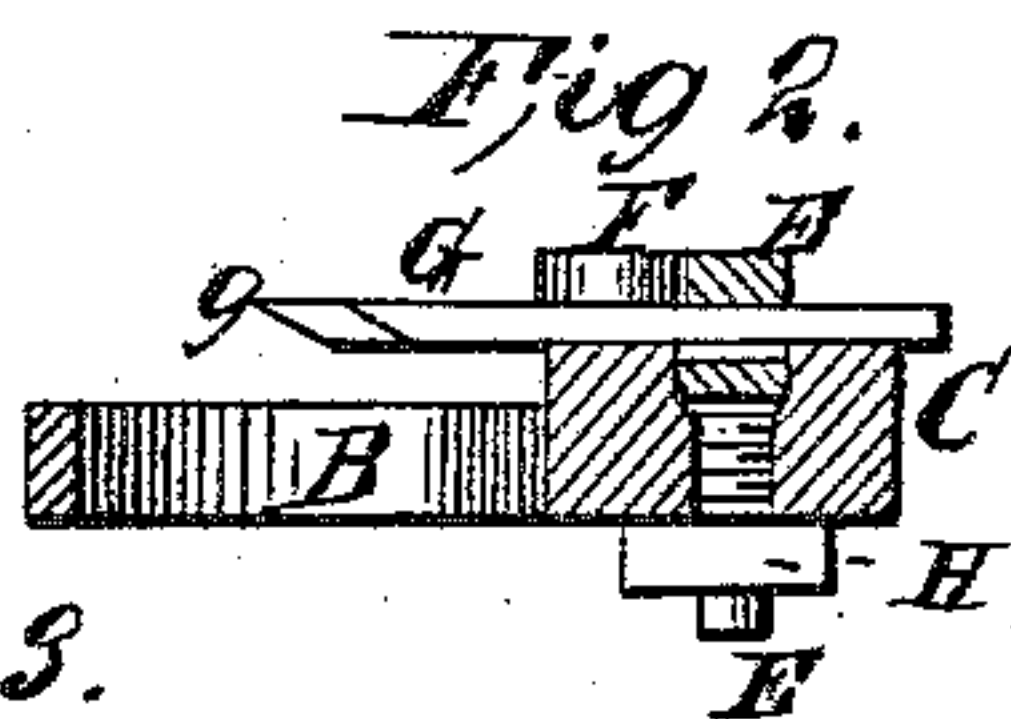
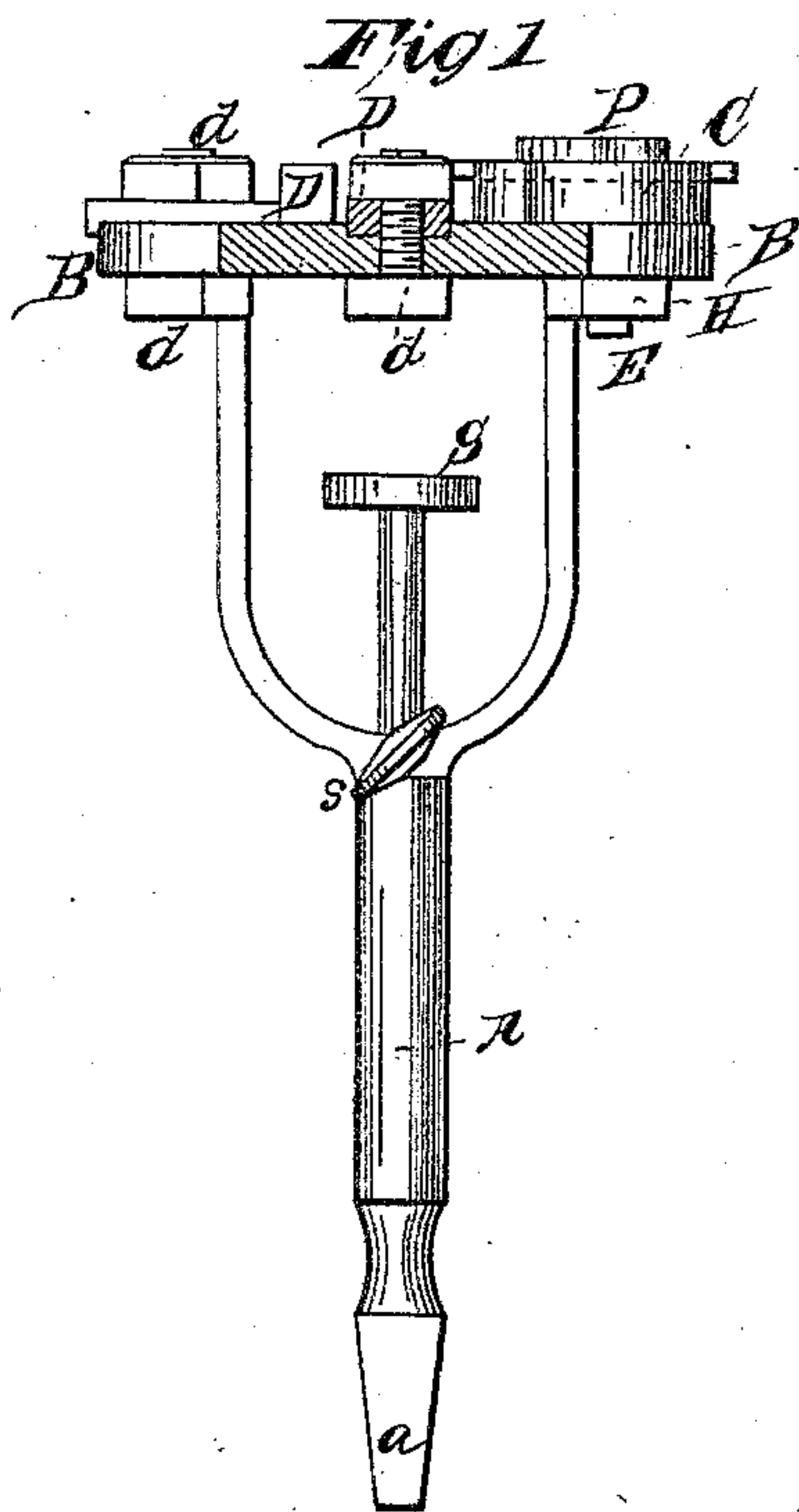


*J.L. Parker,*  
*Hollow Auger,*  
*No 76,804, Patented Apr. 14, 1868.*



*witnesses:*  
*J. C. Kemm*  
*Chas A. Pettit*

*Inventor.*  
*James L. Parker*  
*By Munn & Co*  
*Attorneys*

# United States Patent Office.

JAMES L. PARKER, OF HARRISONBURG, VIRGINIA.

*Letters Patent No. 76,804, dated April 14, 1868.*

## IMPROVEMENT IN HOLLOW AUGERS.

*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, JAMES L. PARKER, of Harrisonburg, in the county of Rockingham, and State of Virginia, have invented a new and improved Machine for Tenoning Spokes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side view, a portion of the head being shown in section, through the line *x x* of fig. 3.

Figure 2 is a cross-section of the head, through the line *y y* of fig. 3.

Figure 3 is a plan of the face of the instrument.

This invention is an improvement in the construction of tools for cutting spoke-tenons by machinery, whereby the instrument is simplified and rendered more effective in operation than those hitherto in use.

In the drawings, A represents a bifurcated stock, having a tang, *a*, by which it is set in the live spindle of a lathe, and caused to revolve on its longitudinal axis at a high speed. At their outer ends the forked arms of this stock carry a stout metallic head, B, shaped like a ring, and provided with a raised bed, C, on one side, in which to fasten the cutting-blades. D D are two dogs, having notched heads projecting into the central opening, O, of the ring or head, and adjustable in position by set-screws *d d*.

In a plan view, the bed C presents a kidney-form appearance, but its face is perfectly flat and smooth. Its outer or convex perimeter coincides with that of the ring or head, and its inner or concave perimeter coincides with the wall of the central opening, O. The cutting-instruments G G' lie across the face of the bed C, their edges, *g g'*, extending over one edge of the circular opening, O. They are countersunk in the face of the bed, and are adjusted to cut more or less deeply, and make the tenon smaller or larger, by sliding them in towards or out from the centre of the head. They are both held firmly in position by means of a curved clamp, F, which extends across the countersink in which the blades lie, and has a slot in it through which both blades pass. A screw, E, passes from this clamp through the head, where, on the side next to the stock A, it is provided with a nut, H, by which the clamp can be screwed more or less tightly down into the face of the bed C, thus clamping the blades G G' more or less firmly in any position required.

The form of the cutting-blades is seen very clearly in figs. 2 and 3. One of them, G', is for cutting away the wood to form the tenon, and is simply a lathe-tool with bevelled face, and a straight edge, the line of which runs towards the spectator, in the view shown in fig. 3, only the corner of the edge being there visible. The other blade, G, has a double-bevelled edge, one inclination of which is seen in fig. 3, and the other in fig. 2, the latter bevel being under the blade as shown in fig. 3, and therefore not visible in that figure. This blade, therefore, cuts along the whole length of the inclined edge seen in fig. 3, and cuts directly into the spoke, forming the shoulder of the tenon.

The instrument being thus constructed, is attached to a lathe, as before explained, and set in motion. The end of the spoke that is to form the tenon is then introduced into the opening O, and the blade C' commences to cut away the wood, leaving a round tenon. The blade G forms a square shoulder to the tenon. The tenon is held in contact with the blades by the dogs D D. The length of the tenon is determined by a stop, S, adjustable by a set-screw, *s*, working in the stock A at the point where it divides to form the arms that support the head B.

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

The combination in one instrument of the two adjustable dogs D D, the cutting-instruments G G', when constructed and arranged together as described, the clamp F, the stop S, adjustable by means of the set-screw *s*, the bifurcated stock A, and the solid head B, provided with the central opening O and the raised bed C, in which the blades are countersunk, all the said parts being constructed and arranged and operating together substantially in the manner and for the purposes set forth.

To the above specification of my improvement, I have signed my hand, this sixth day of February, 1868.

JAMES L. <sup>his</sup> X PARKER.  
mark.

Witnesses:

G. B. CLOW,

A. M. TANNER.