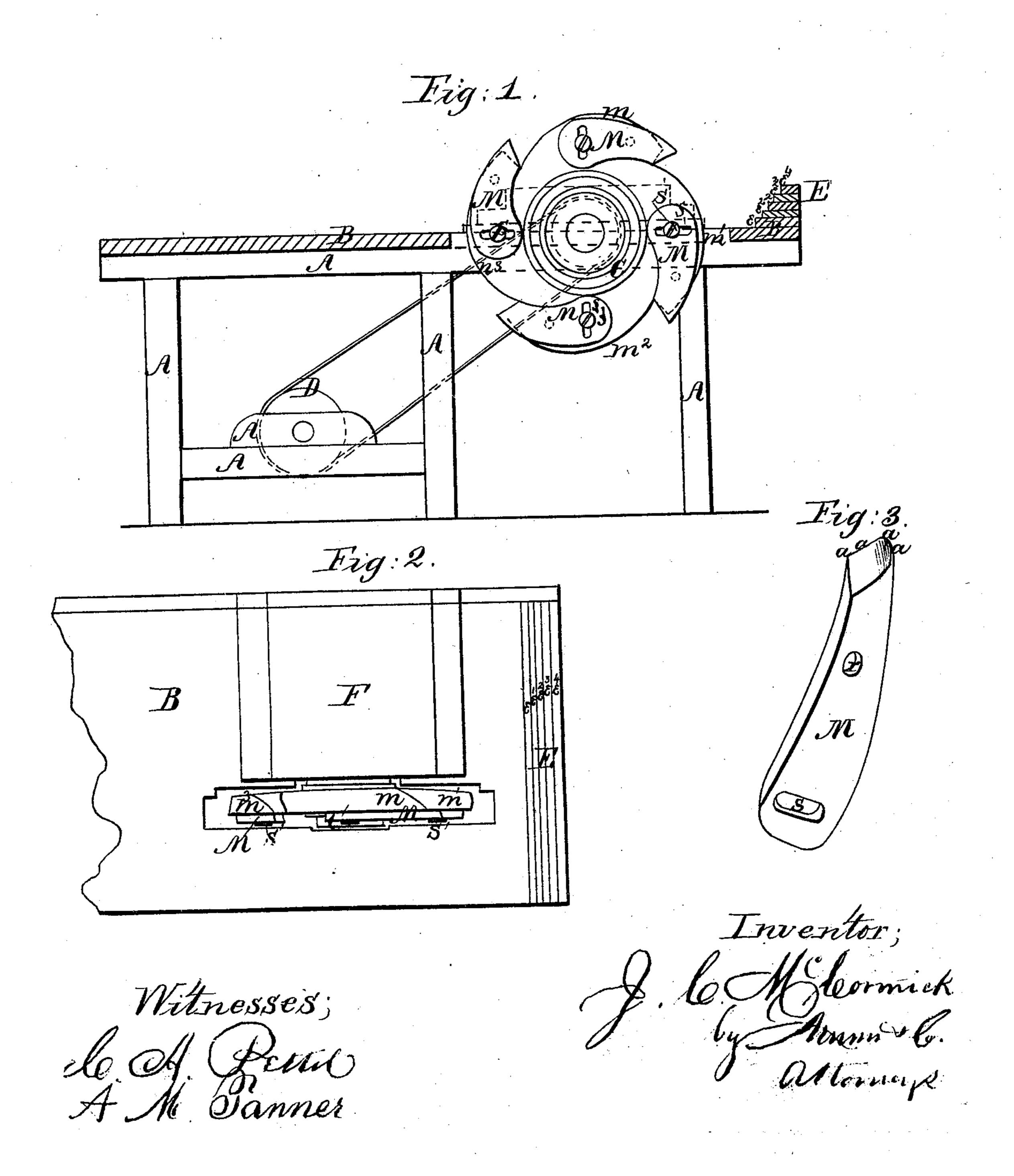
ICM Chair Seats. No. 20,458. Faterited Nov. 2. 1869.



Anited States Patent Office.

JOSEPH C. McCORMICK, OF SMICKSBURG, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND GEORGE STITELER, OF SAME PLACE.

Letters Patent No. 96,458, dated November 2, 1869.

EMENT IN MACHINE FOR MAKING CHAIR-SEATS.

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, JOSEPH C. MCCORMICK, of Smicksburg, in the county of Indiana, and State of Pennsylvania, have invented a new and improved Machine for Making Chair-Seats; 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 accompanying drawings, making a part of this specification, in which-

Figure 1 is a longitudinal vertical section. Figure 2 is a plan, one end of the machine having

been broken away.

Figure 3, is a perspective view of one of the bits de-

tached.

The object of this invention is to provide, for public use, a simple, convenient, and effective machine for cutting out and moulding curved seats for common wooden chairs.

In the drawings— A indicates the frame;

B, the platform or table, supported by the frame;

C, the cutter-head;

D, the driving-gear, belts, &c.;

E, the head or graduated rest at the end of the table, in front of the cutter;

F, an elevated platform at the left side of the cut-

ter, made removable, if preferred; and

M M, the bits or cutters, fastened to the side of the entter-head by a pivot-screw or rivet, r, and a slot, s, and set-screw, s', in the manner clearly shown in fig. 1.

My invention relates solely to the construction of the cutting-instrument, and the arrangement of the same with relation to the graduated head E, formed of the steps e, e^1 , e^2 , &c., and placed transversely across the table B, at right angles with the vertical plane of the cutter.

The cutter-head is a cam-shaped disk, having four (more or less) projections, $m m^1 m^2 m^3$, arranged around its perimeter, as seen in fig. 1, with their left-hand

edges bevelled off.

The bits are attached to the right-hand side of these cam-shaped projections, so that their cutting-edge projects beyond the abrupt or front edge of the projections.

By setting the screws s' at different points along the slots s, the inclination of the bits to the axis of the disk C may be adjusted, at pleasure, so that the bits will cut into the wood more or less rapidly.

The cutting-end of each bit is scalloped out on the

left side, so as to leave a sharp, curved edge, a a a a, as shown in fig. 3.

In practical operation, the machine works as fol-

lows:

One edge of the plank that is to become a chairseat is rested upon one of the steps e e1, &c., or upon the platform, in front of the lower step, and the opposite edge, held in the workman's hand, is brought down until the bits strike the flat side of the plank, and cut to a sufficient depth into it. The plank is then moved endwise a little, and another similar cut is made alongside of and parallel to the first, and so on, until it has been scored in like manner from end to end, when the wood between the cuts may easily be removed; or, if preferred, in practical operation, the plank may be so gradually moved that the cutters will themselves remove all the wood to the depth of their cut as they perform their work. If this does not leave the plank cut out properly on that side, its position may be changed, by resting its edge on a different step, (higher or lower, and nearer to or further from the cutter-head,) and again going through the process; and this may be repeated till the plank has become properly moulded on that side. It may then be turned, and moulded on the opposite, until it has assumed the scroll-shaped form that adapts it to the office it has to perform.

Having thus described my invention,

What I claim as new, and desire to secure by Let-

ters Patent, is—

1. The bit, constructed in the form shown in fig. 3, having its cutting-edge scalloped out on the left side, so as to leave a sharp, curved point, a a, the rivethole r, and transverse slot s, near the widened end of the bit, and opposite the cutting-point, substantially as described.

2. The rotating disk c, having the cam-shaped projections $m m^1 m^2 m^3$, with their left edges bevelled off, in combination with the bit above claimed, substan-

tially as described.

3. In connection with the cutter-head C, having the bits M, the fixed head or rest E, having the steps e e e e, substantially as and for the purposes described.

To the above specification of my invention, I have signed my hand, this 17th day of June, 1869.

J. C. McCORMICK.

Witnesses:

EDM. F. Brown, CHAS. A. PETTIT.