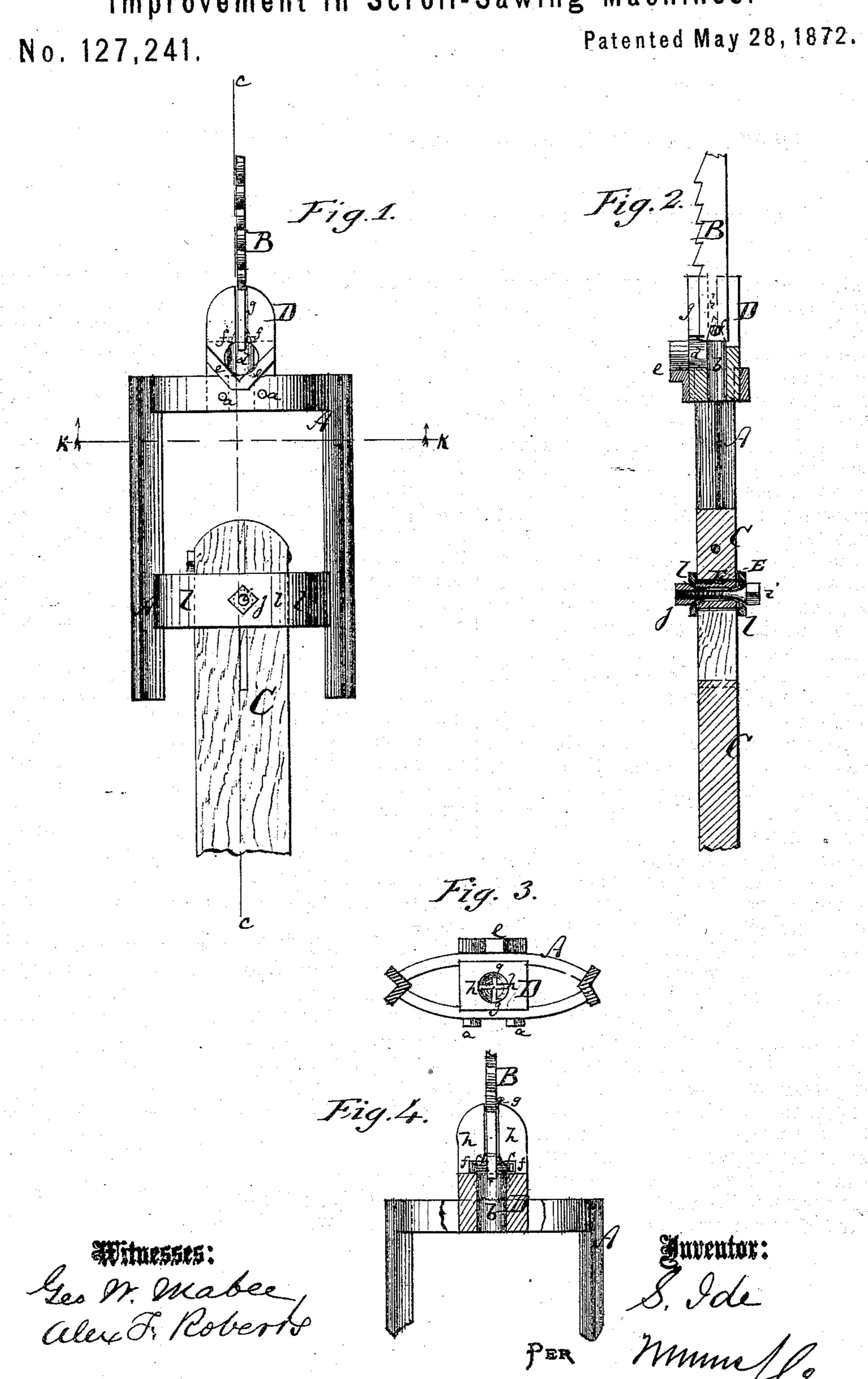
SAMUEL IDE.

Improvement in Scroll-Sawing Machines.



## UNITED STATES PATENT OFFICE.

SAMUEL IDE, OF MEDINA, NEW YORK.

## IMPROVEMENT IN SCROLL-SAWING MACHINES.

Specification forming part of Letters Patent No. 127,241, dated May 28, 1872.

Specification describing a new and Improved Scroll-Saw Cross-Head, invented by Samuel IDE, of Medina, in the county of Orleans and State of New York.

Figure 1 represents a front view of my improved scroll-saw head and connections. Fig. 2 is a vertical transverse section of the same on the line cc, Fig. 1. Fig. 3 is a horizontal inverted section on the line k k, Fig. 1. Fig. 4 is a detail sectional side view of the same.

Similar letters of reference indicate corre-

sponding parts.

This invention relates to a new coupling for the pitman and lower cross-head of a reciprocating saw, and to a novel connection of the saw and cross-head, and has for its object to facilitate the attachment and removal of the saw-blade, and insure a reliable joint for the upper end of the pitman where it is fastened to the cross-head. The invention consists, first, in a peculiar arrangement of the upper part of the cross-head for the reception of the saw; and, secondly, in the use of a thimble and conical screw connection for the pitman, as hereinafter more fully described.

A in the drawing represents the cross-head of the saw-mill. B is the lower part of the saw, and C the upper part of the pitman. Into the upper end of the saw-head is fitted and fastened, by bolts a a, a block, D, cross-slotted vertically to the top, and provided with a vertical bore, b, which leads from the lower end to the junction of the cross-slots, as is clearly shown in Fig. 4. A horizontal aperture, d, leads also to the junction of the cross-slot, a Vshaped projection, e, being on the block D, under said aperture d. The vertical bore b is made with a sharp-pointed tool, so it will be smaller at its upper end, as indicated in Figs. 2 and 4. The saw has projecting-pins ff at its lower part, the ends of said pins being rabbeted to be narrow. The saw is applied

to the block D by being first rested upon the projecting Ve, and then introduced in the slot g, so that the pins f will enter through the aperture d, and till they are in line with the transverse slot h. The saw is then raised, drawing the pins f into the narrow upper part of the bore b, so that their smaller ends will be guided and held in the slot h. Thus the required connection is established. The saw is easily detached by being drawn down and moved forward, all of which can be done with one hand, and without inconvenience of any kind. Through the upper part of the pitman C is fitted a thimble, E, of cylindrical outer form, but whose bore is somewhat enlarged at the ends. A bolt, i, having a conical head and adapted to receive a conical nut, j, holds the pitman confined to a slotted transverse piece, l, of the cross-head, by fitting through l and into the thimble, so that the conical head and conical nut will enter through the transverse piece into the thimble, in manner clearly shown in Fig. 2. This connection is reliable and simple, and prevents the fastening-screw from working loose, as the greater part of the strain is transferred to the thimble.

Having thus described my invention, I claim as new, and desire to secure by Letters Pat-

ent—

1. The block D having the cross-slot g h, bore b, opening d, and projection e, and applied to the cross-head of a reciprocating saw, substantially as and for the purpose herein shown and described.

2. The combination of the thimble E, pitman C, and cross-head A with the conicalheaded screw i and conical nut j, as set forth. SAMUEL IDE.

Witnesses: ANDREW COOK, ALFRED IDE.