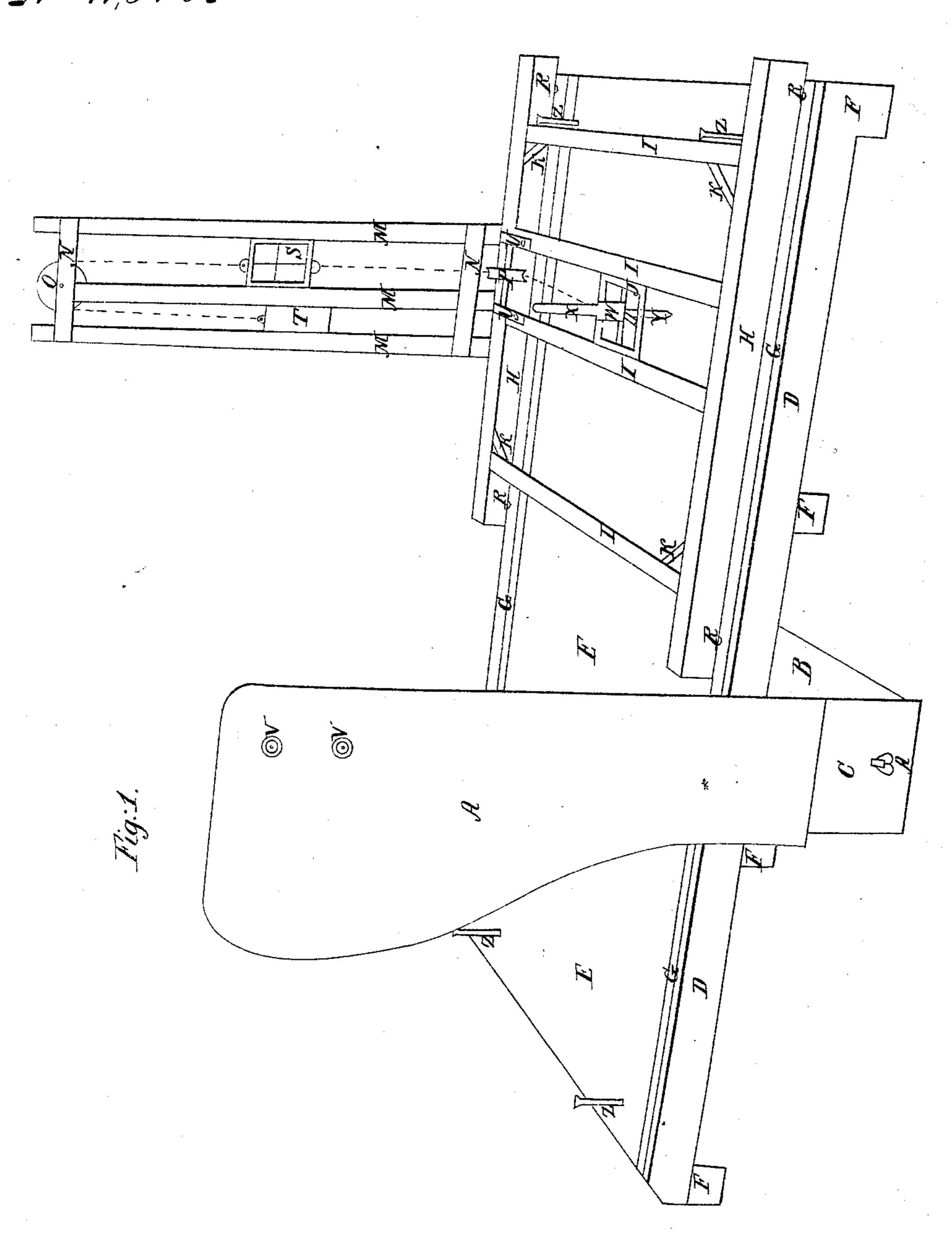
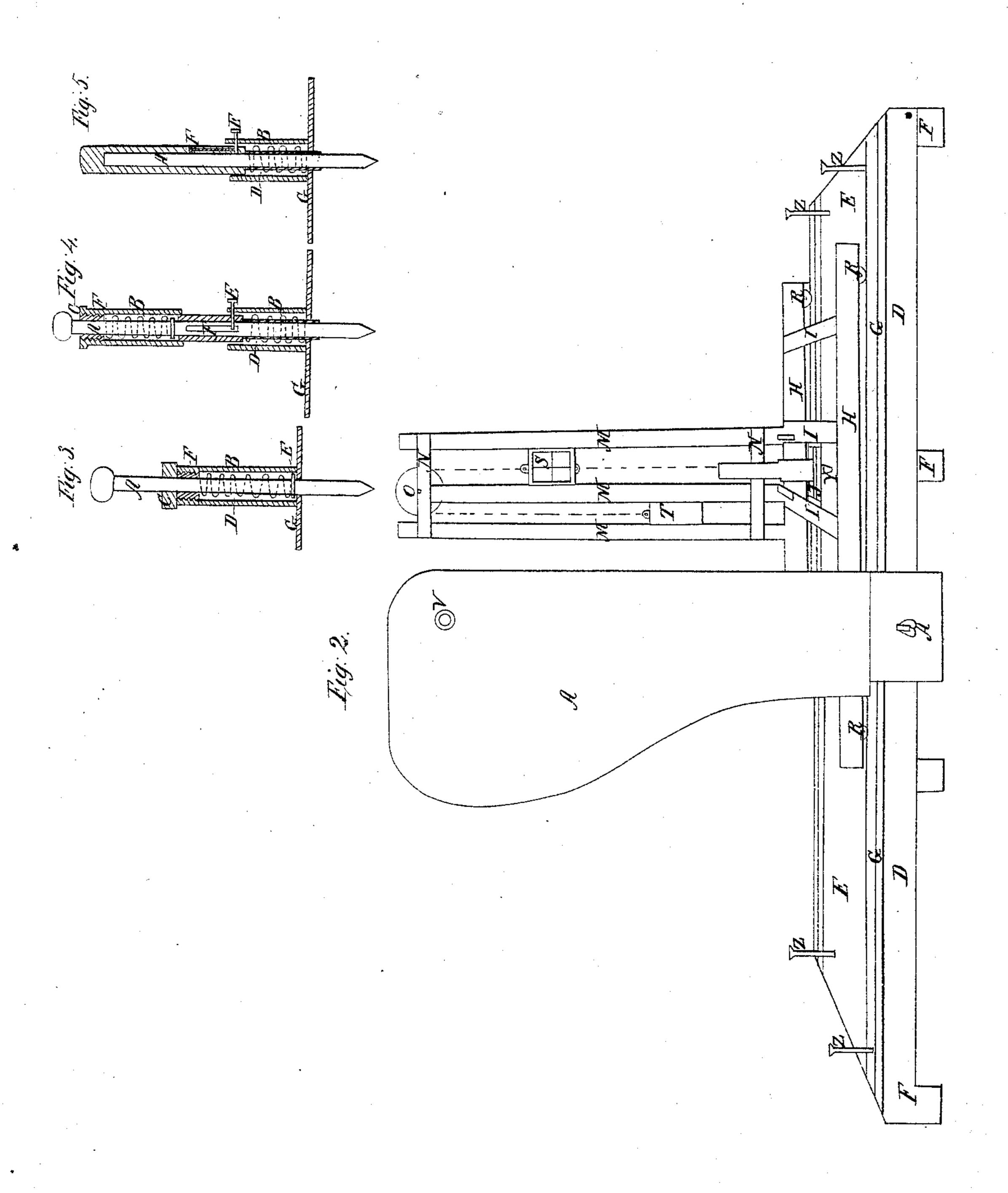
Sheet 1-2, Sheets

M. Milling, Artists' Appliance, Patented Nov. 21, 1854.



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UNITED STATES PATENT OFFICE.

MIGHILL NUTTING, OF PORTLAND, MAINE.

ARRANGEMENT OF PENCILS FOR DRAWING-MACHINES.

Specification of Letters Patent No. 11,970, dated November 21, 1854.

To all whom it may concern:

Be it known that I, MIGHILL NUTTING, of Portland, in the county of Cumberland and State of Maine, have invented a new and useful and improved mode of taking perspective drawings, which I denominate "Nutting's Perspective Machine"; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

Figures 1 and 2 are different views of the same machine, for taking perspective drawings. Figs. 3, 4 and 5 are different views of the pencil and showing the different ways of arranging them which are to be applied to said machine.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I first make a railway or track G the rails from 20 to 30 inches long more or less as may be wanted and placing them from 10 to 15 inches apart and confined to the frame E; there should be a smooth, true board, or flat surface, made of any material confined to the frame on which the paper is laid when the drawings are taken.

On the track or railway G runs a car or carriage H on wheels R to play in the most perfect manner in order to move with perfect ease; to the car or carriage H is attached an upright frame M consisting of

three posts or studs more or less M, M, M, all fastened together at or near the top by a cross piece N between two of which runs or plays a slide S (in a groove), made of brass or any other material with two wires

otherwise to make a cross,—this cross or point I keep between my sight V, and the article to be drawn—moving it in any direction you please, and at the same time the pencil moves and marks to make the draw-

pencil moves and marks to make the drawing required; also between the other two upright posts runs in a groove a weight T attached to a cord passing over the pulley O which carries up the slide S, (or the

weight may be otherwise arranged;) there is also a slide J runs in a groove between two rails or cross pieces I, I, on the horizontal part of the car H and is attached to slide S by a cord passing under pulley P in

which slide J is a pencil Y which is a common pencil case with points inserted as

ordinarily, or their equivalents which I use, placed in such a manner so as to mark on the paper which lies on the platform E between the rails G and giving a perfect perspective outline or drawing to any machinery, building, landscape, &c. The pencil Y is more perfectly shown in Figs. 3, 4 and 5, which show three different ways of arranging my pencil.

Fig. 3 is a sectional drawing showing the internal parts of the arrangement of the pencil—in this figure the pencil A is thrown down by the spring D and keeps it on the paper and is to be raised by the hand when 70 it is required to be taken from the paper; C is a cap which is screwed on, against which the spring presses; E is a washer confined to the pencil A against which the spring rests in order to bear the pencil on 75 the paper; B is a case or tube in which the pencil A and spring D plays; F represents the screw on the cap C; G represents part of the slide to which the tube B is attached.

In Fig. 5, the pencil is thrown up by so spring D to keep it off from the paper at all times when not wanted to mark and is pressed down by the finger when you wish to mark, and is otherwise arranged, the same as Fig. 3.

Fig. 4, has a double operation the same as Figs. 3 and 5—the top part like Fig. 3, and bottom part like Fig. 5, which is no doubt the best operation but more costly.

In the sight-board or plate A is a hole 90 which I call the point of sight, and may be moved nearer to or farther from the slide S—which operation varies the size of the drawing and without which sight-board and hole we could not get the true dimensions 95 or proportions of the object to be drawn; in and near the top of said sight-board A is the hole V through which we look at the object to be drawn and keep always the cross of the wire in slide S in a line between 100 the sight V and the object to be taken or drawn; sight V moves vertically, and is held in its place by screw A; as the cross in slide S moves in the proper line to be taken, the pencil Y marks on the paper making a per- 105 fect drawing. Said instrument or machine may be made of any material to answer the purpose.

My perspective machine which I have herein described is calculated to save much 110 labor—as with this machine a drawing of any piece of machinery can be taken in

about one tenth part of the time, which is required now to take a perspective drawing by the ordinary way; and it will also save a large amount of time which is expended in learning to draw, as any intelligent person with this machine can learn in a few hours to take a perspective drawing more accurately than the best artist—although he might have spent years in perfecting his art.

The carriage H may be run on large or small wheels or slide without wheels—the wheels may run on a track or rail or the carriage may run between two guides, with or without wheels—bottom or side, or it

may be hung in different ways—instead of running on wheels or sliding, to accomplish the same objects.

What I claim as my invention and desire

to secure by Letters Patent is—

I claim the combined arrangement and the application of the pencils as set forth in my specification.

In testimony whereof I hereunto subscribe

my name.

11,970

MIGHILL NUTTING.

Witnesses:

James M. Jewett, Geo. S. Nutting. 0