No. 666,415. Patented Jan. 22, 1901.

J. O. FALL.

COMBINED SKETCHING HOOD AND PERSPECTIVE SCALE.

(Application filed Apr. 18, 1900.)

(No Model.)

Fig. 1

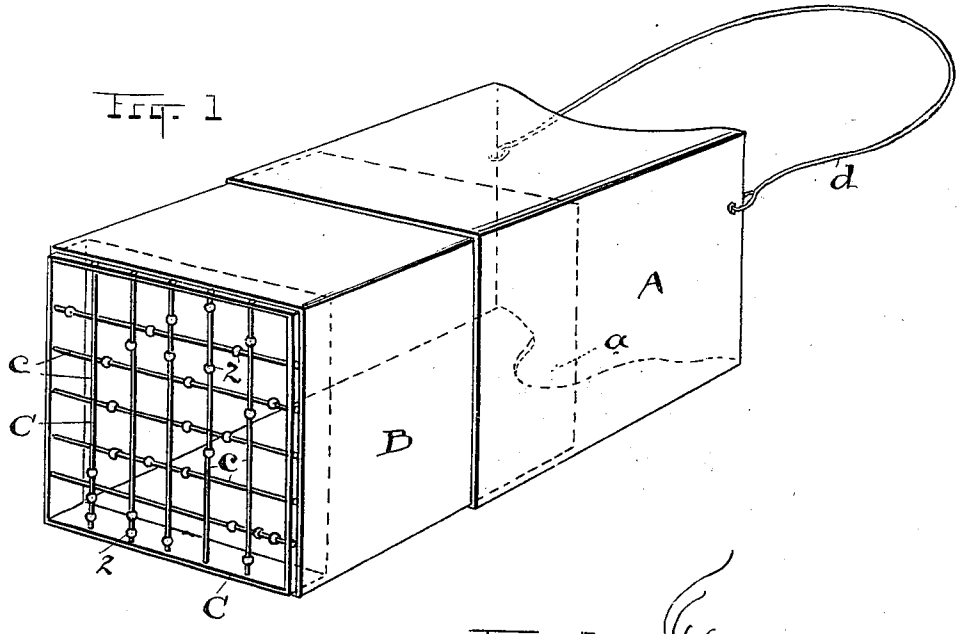


Fig. 2.

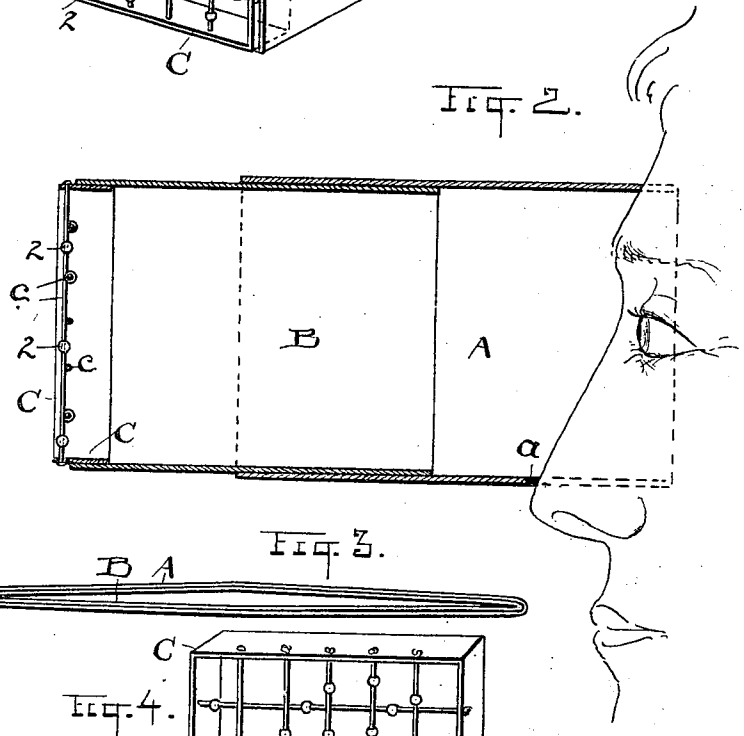
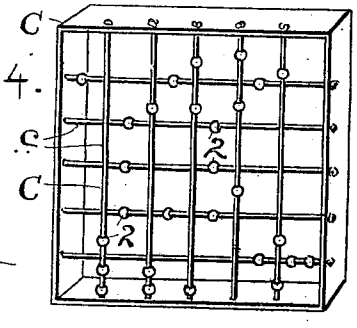


Fig. 3.

Fig. 4.



ATTEST

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COMBINED SKETCHING-HOOD AND PERSPECTIVE-SCALE.

SPECIFICATION forming part of Letters Patent No. 666,415, dated January 22, 1901.

Application filed April 18, 1900. Serial No. 13,304. (No model.)

To all whom it may concern:

Be it known that I, JOHN O. FALL, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in a Combined Sketching-Hood and Perspective-Scale; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a combined sketching-hood and perspective-scale adapted to be worn over or upon the face for free-hand sketching from nature, as well as for transferring from pictures and other purposes, and is designed especially for protecting the eye from light and dust and for focusing the vision on the picture or portion of picture to be sketched, reproduced, or scaled and serving to completely shut out all superfluous surroundings. It aids the student in the art of delineating objects according to the laws of perspective and to transfer to a picture the points and outlines of scenery, so as to represent them in their proper geometric relations as viewed from some one point.

In the accompanying drawings, Figure 1 is a perspective front and side elevation of one form of my novel hood and scaling device partially extended. Fig. 2 is a longitudinal sectional elevation of the same device with an outline of a face behind it and showing how it is worn. Fig. 3 shows an end elevation of the device collapsed or folded for shipping or carrying in a satchel. It will of course fold flat. Fig. 4 is a perspective view of the cord-frame alone.

In the construction thus shown, which is one form of my invention, the device comprises three distinct members or parts A, B, and C, the parts A and B being telescopically united and the part C inserted temporarily or permanently in the end of B—in this instance for outlining distant scenery, wherein it operates as a graduating or perspective scale, confining the vision according as it is more or less elongated and promoting the focusing of the vision on the particular portion or section of the field which for the time is to be observed and sketched, outlined, or otherwise delineated, or in like manner the device serves for closer work with such manipulation as the nature and nearness of the work may suggest or require. In some cases where the work is near at hand or there are other controlling reasons the outer tube B may be withdrawn and the inner tube A alone be used. Then the divisional member C is inserted in A, or I may reverse B in A and bring the part C more or less centrally within the tubes. These various uses are determined somewhat practically on the spot and according to conditions and are made the subject of special instruction to the user, and hence are not necessarily developed in this description.

Now as a further aid to concentration or focusing of vision and the practical exclusion of all other portions of the field but that to which the eye is specially directed for the time being I provide the proportional or perspective scale C, wherewith the field, picture, or object, distant or near, is subdivided into blocks or sections, preferably square, and into as many such sections as can be advantageously employed, the number not being material here. These subdivisions may be provided or formed, if desired, by means of cords *c* or their equivalent run at any angle to each other across the extremity of one of the tubes A or B, but B in this case, and fastened directly thereto or to the frame C, as here shown, and in any case said strands may be set in from the outer end of the tube more or less and still serve the same purpose. In the present case the frame C can be set in from the end of tube B, or if a single tube were used it would be placed therein in like manner, and, as already suggested, the telescopic construction may be omitted for closer work. In a sense these subdivisions interposed in the view or vision of the field to be sketched or delineated correspond to lines traced on canvas with which art students are familiar, but of course have widely-different adaptabilities.

A further element of very great utility in this device is the movable objects 2 on the strands or cords *c*. These cords are preferably of suitable strong twine, because they serve to hold the objects 2 wherever they may be placed without slipping or sliding away, as well as promoting folding of the device when they are in the tubes themselves. The

objects 2 are shown here as beads; but they may be cubes or other suitable forms, and a number of these—one, two, or more—are placed on each cord, wire, or strand *c* to move here or there in working out any figure, design, landscape, picture, or the like which is to be developed. These beads or objects 2 serve as sights or guides to diverging objects and are adapted to be marshaled here and there in the line of vision to an object or to special points thereon which may determine its configuration—such as the corners of buildings, their doors, windows, and the like—whereby their converging or diverging lines can be worked out in true perspective.

It will thus be seen that what the scale is to music this device practically and essentially is to art, and it is a graduating-scale, both in outline and detail, for obtaining or diminishing or enlarging pictures, still life, or distant scenery. This is accomplished by placing dots or beads according to lines of vision or vista at the time of observation. Thus, supposing the eye to be focused on a building, to work out the figure in a sketch or other way the beads are slid to configure the corners and such other points of the building as may be of note to bring the entire subject within the command of the artist for whatever use. From this outline thus obtained the artist can work to any size he desires on the canvas, paper, or other surface whereon the picture is to be made by sketching or otherwise.

The hood or parts A and B are preferably of pasteboard or its equivalent, preferably adapted to fold on their corner lines and to collapse for shipping or storing away, though they may be rigid, and the part A is provided at its bottom and center with a recess or opening *a* for the nose and is otherwise constructed at its edge to conform to the face and provided with a ribbon or cord *d* to engage over the head. The part C may be of any suitable light stiff material and is removable for knock-down or folding purposes.

The hood may be retained on the face during use or in certain cases temporarily placed on a separate support within convenient reach of the artist, and the invention is practical for mechanical designing, drawing, kindergarten work, and for use in the decorative arts and where transfers are to be made. The beads respond readily for working out an outline of any object, and they may have various and distinguishing colors or be used with colors or paints to be applied in the transfers. In fact, the uses are many, even many more than need be enumerated here.

The lines or outlines existing or worked out in this instrument—as, for example, the configuration of a building—may have a practical transfer to canvas or paper for reproduction thereon by providing such canvas, paper, or other surface with cords or strands having beads, eyelets, or other objects to be located in conformity with the beads or eyelets summoned into the outline in the instrument itself, and on such canvas or other surface which is to receive the picture the work may be enlarged or reduced, according to distance.

By the word "strands" I mean any cord, string, thread, wire, or the like which will serve in the position of the strands here shown.

The hood may consist of one or more sections of greater or less length each, and the outer section carrying the strands may be taken off and put onto the face, as here shown.

What I claim is—

1. A vision-tube adapted to be used by artists and others having a series of intersecting strands traversing the line of vision through the tube, and movable objects on said strands, substantially as described.

2. The hood substantially as described made in a plurality of collapsible sections sleeved one upon the other and the outer section provided with intersecting strands extending entirely across the same and dividing up the space into sections, substantially as described.

3. A tube for taking observations constructed at one end to fit on a face and cords to fasten it on the head and a separate member in said tube having intersecting strands arranged at an angle to each other extending from side to side of the tube and breaking up the vision, substantially as described.

4. A telescoping observation-tube having a series of strands across the same and slidable objects on said strands, substantially as set forth.

5. A telescoping observation-tube for artists and others, closed between its end to exclude side light and limit the field of view and provided with strands across the line of vision, through said tube, and slidable objects on said strands, substantially as described.

6. As a new article of manufacture, a perspective-scaling device for artists and other purposes, consisting of a suitable frame and a series of strands fixed to said frame and intersecting each other and a series of slidable objects on said strands, substantially as described.

Witness my hand to the foregoing specification this 14th day of April, 1900.

JOHN O. FALL.

Witnesses:
H. T. FISHER,
H. E. MUDRA.