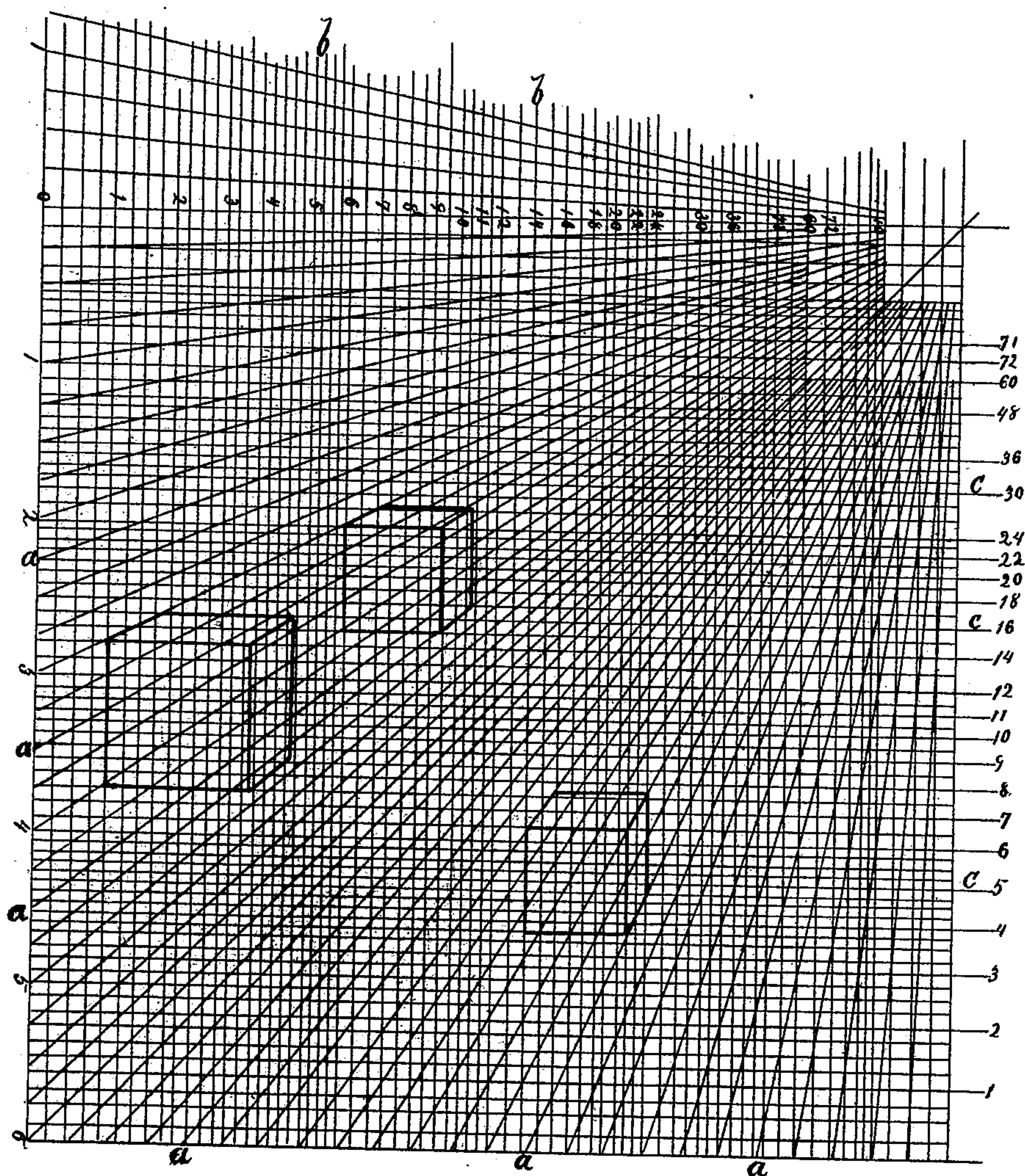


E. M. HAMILTON.
Perspective Diagram Sheet.

No. 229,404.

Patented June 29, 1880.



WITNESSES:

Henry N. Miller
C. Bulgwick

INVENTOR:

E. M. Hamilton

BY

Munroe

ATTORNEYS.

UNITED STATES PATENT OFFICE.

EMERY M. HAMILTON, OF NEW YORK, N. Y., ASSIGNOR TO C. T. RAYNOLDS
& CO., OF SAME PLACE.

PERSPECTIVE DIAGRAM-SHEET.

SPECIFICATION forming part of Letters Patent No. 229,404, dated June 29, 1880.

Application filed September 24, 1879.

To all whom it may concern :

Be it known that I, EMERY M. HAMILTON, of the city, county, and State of New York, have invented a new and useful Improvement in Perspective Diagram-Sheets, of which the following is a specification.

The nature of my invention consists in a diagram for the use of draftsmen in making perspective sketches or drawings, whereby such drawings may be made in true perspective and to scale in every part.

My invention consists in a diagram-sheet having printed upon it guide-lines in perspective and vertical and horizontal lines, the result of these combined lines being that the sheet is laid out in perspective scales, which can be utilized as guide-lines for making a drawing at any angle to the horizon and vertical. These features I will describe more particularly with reference to the accompanying drawing, wherein I have represented a portion of one of my improved diagram-sheets wherein the perspective lines vanish at the center.

Referring to the drawing, the perspective shown is that of a rectangular tunnel ten feet deep and having equal sides, into which the observer is looking directly. The outer lines will preferably inclose a space twelve inches square. From the center to the boundary-lines there are perspective lines *a*, placed one-quarter inch apart at the outside and vanishing at the center. Near the center every other line *a* is stopped and the space divided by the half-inch lines only to prevent confusion.

The whole sheet is, in addition, printed with vertical lines *b* and horizontal lines *c*, or lines in both directions parallel to the boundary-lines. These are laid out so as to divide the perspective lines *a* into quarter-inches, the distance between these lines diminishing in true relation to the perspective—that is to say, these cross-lines *b c* indicate quarter-inches from the boundary-lines toward the vanishing-

point on any of the perspective lines *a*, this rule being followed to the center, or until the distances between them become too small for use, from which point the cross-lines are reduced in number to indicate half or whole inches.

In use the perspective and cross lines are to be used according to the dimensions of the object to be drawn. This may be done on any of the perspective lines *a*, according to the angle required, and at any portion of their length. The lines *a* are to be followed for the general perspective outlines, and the scale given by the cross-lines will serve to guide the draftsman in making the drawing correctly. For convenience, the perspective scale will be numbered upon the margin of the sheet, both vertically and horizontally.

When completed in this manner, all portions of the drawing will be to scale and in true perspective. The diagram is also useful for sketching, and enables the draftsman to see at once how an object—say a building—will look in certain proportions, without the necessity of resorting to the usual laborious process of first making a plan and elevation before the perspective can be made with accuracy.

It is to be understood that the lines of the prepared sheet are to be faint lines, printed by any desired means. The diagram-sheet may be printed, for special kinds of work, at any angle desired, and having lines vanishing at both sides.

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

The prepared diagram-sheet having the parallel vertical and parallel horizontal lines *b c* and the converging perspective lines *a*, as shown and described.

EMERY M. HAMILTON.

Witnesses:

GEO. D. WALKER,
C. SEDGWICK.