Dec. 25, 1923. 1,478,536

J. G. SERVAIS

DEVICE FOR COUNTING MESH OR GRIDS

Filed Jan. 23, 1920

Fig. 1

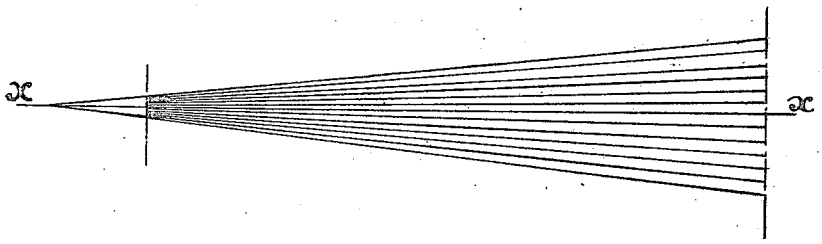


Fig. 2.

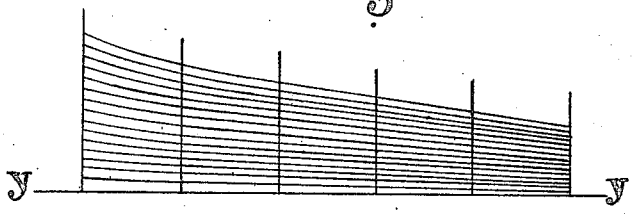
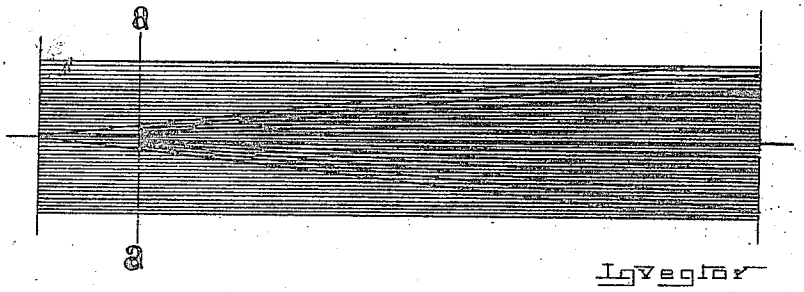


Fig. 3.



Witnesses
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per
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UNITED STATES PATENT OFFICE.

JULIEN GASTON SERVAIS, OF PARIS, FRANCE.

DEVICE FOR COUNTING MESH OR GRIDS.

Application filed January 23, 1920. Serial No. 353,513.

(GRANTED UNDER THE PROVISIONS OF THE ACT OF MARCH 3, 1921, 41 STAT. L., 1313.)

To all whom it may concern:

Be it known that I, JULIEN GASTON SERVAIS, a citizen of the Republic of France, residing at Paris, in the Republic of France, have invented certain new and useful Improvements in a Device for Counting Mesh or Grids, (applications filed in France, 17th of September, 1917, England, 28639, Nov. 19th, 1919), of which the following is a specification.

The present invention relates to an improved device for counting mesh or grids.

It is frequently desirable to be able to rapidly estimate a number of wires, threads or elements of mesh work or of a grid consisting of a large number of parallel fibres or elements for instance, in the textile industries a device is in use, usually termed a "linen tester" consisting of a small magnifying lens mounted in a frame to present a fixed focus and embracing a field of predetermined size so that the number of threads within said field may be rapidly and accurately estimated by examining the magnified image.

According to the present invention, a plate, preferably translucent or transparent, of glass, celluloid, waxed paper or metal is provided on its surface with a plurality of lines or gravings ruled according to a symmetrical geometrical form such as for instance, a radiating cone.

By superposing such a device upon a net work or grid the number of filaments of which are to be estimated the intersections of the lines of the network with those ruled on the device will not be in the form of spots or points but rather in the form of elongated dashes or lines which are obviously more easy to count than the spots. Moreover these elongated dashes or lines will be distributed over a larger area.

The invention is more particularly described with reference to the accompanying diagrammatic drawing in which:—

Figure 1 shows one form of rulings for the device.

Figure 2 shows an alternative form of rulings.

Figure 3 shows the device in use.

The rulings shown in Figures 1 and 2 may be printed engraved or photographed or otherwise formed on a transparent or translucent plate or sheet adapted to be placed over the net work or grid the number of filaments of which are to be counted or estimated.

If for instance it is desired to count the number of threads or filaments in a fabric and this is transparent, the rulings can be seen through the fabric or the transparent plate may be superposed over the fabric.

In a modification of the invention the lines may be formed of upstanding ribs on the surface of the plate to be used as a printing matrix for printing series of lines on to a piece of network or grid to be counted.

I declare that what I claim is:—

1. A method of counting filaments or elements of a net work or grid by arranging in a parallel plane a lamina having ruled on it a plurality of non-parallel lines disposed at equal angles to one another and inclined to an axis of symmetry to produce dark spaced spots with a rectilinear meshwork.

2. A method of counting filaments or elements of a net work or grid by arranging in a parallel plane a transparent lamina having ruled on it a plurality of opaque non-parallel lines, disposed at equal angles to one another and inclined to an axis of symmetry to produce dark spaced spots with a rectilinear meshwork.

3. A device for counting filaments of a network comprising a lamina having ruled thereon a plurality of non-parallel lines arranged at equal angles to one another and to a common axis of symmetry and intersecting the plurality of normals to said axis of symmetry at equal intervals.

In witness whereof, I have hereunto signed my name this 28th day of Nov. 1919, in the presence of two subscribing witnesses.

JULIEN GASTON SERVAIS.

Witnesses:

ANTONIN MONTEILHET,

HENRY I. WILCOX.