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J. B. BURGARD
THREAD COUNTING DEVICE
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2,096,669

Fig. 1.

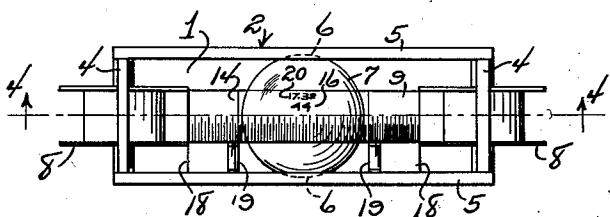


Fig. 2.

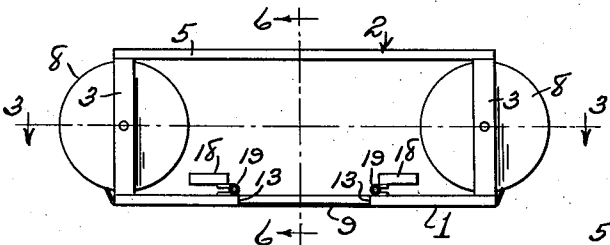


Fig. 5.

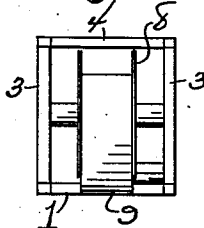


Fig. 3.

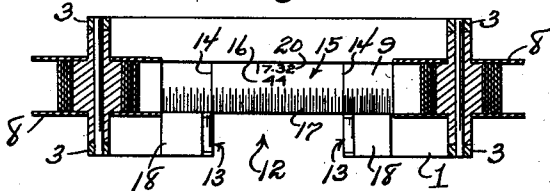


Fig. 6.

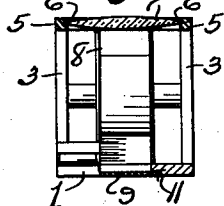
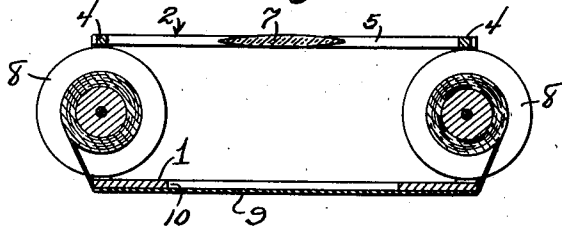


Fig. 4.



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2,096,669

THREAD COUNTING DEVICE

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6 Claims. (Cl. 33—1)

My invention relates to improvements in pick or thread counting device for use in counting the number of threads in a unit of length of cloth.

Such devices as commonly constructed are characterized by a graduated scale for comparison with a like number of threads in a selected unit of length of cloth to ascertain the number of threads in said unit. Devices so characterized are open to the objection that the scale is invariable as regards the spacing and the number of graduations for comparison with a selected unit the result of which is that it is practically impossible with the same device to make a comparison count of the number of threads in cloths in each of which the number and the spacing of the threads per unit of length is different from that in the others.

With the foregoing in mind, the principal object of my invention, generally stated, is to provide a thread counting device which is adaptable for use in making an exact comparison count of threads in a wide variety of cloths in each of which the number and the spacing of the threads per selected unit of length is different from that in the others.

More specifically, the primary object of my invention is to provide a thread counting device equipped with a wide variety of scales each comprising a different number of graduations per inch and per centimeter readily positionable selectively over the cloth for comparison with like units of length of the latter and without moving the device off the cloth, the device being easily convertible for use of the same scales in comparing either inch or centimeter units of length of cloth.

Other objects are to provide a device for the purposes set forth which is simple in construction, economical to manufacture, durable, and readily movable over the cloth to a selected position.

Other and subordinate objects together with the advantages of my improvements will be readily understood when the following description and claims are read with reference to the accompanying drawing.

In said drawing:

Figure 1 is a view in top plan illustrating a thread counting device constructed according to my invention.

Figure 2 is a view in front elevation.

Figure 3 is a view in horizontal section taken on the line 3—3 of Figure 2 looking in the direction indicated by the arrows.

Figure 4 is a view in vertical longitudinal sec-

tion taken on the line 4—4 of Figure 1 looking in the direction indicated by the arrows.

Figure 5 is a view in end elevation, and

Figure 6 is a view in transverse section taken on the line 6—6 of Figure 2 looking in the direction indicated by the arrows.

Referring to the drawing by numeral, my invention comprises a rectangular flat base plate 1, of any suitable material such as light metal or wood, and supporting a substantially rectangular frame 2. The frame 2 comprises a pair of opposed standards 3, at each end of the base plate 1, the standards of each pair being connected at their upper ends by a transverse bar 4. The standards 3 on opposite sides of the base plate 1 are connected by longitudinally extending bars 5 said bars being grooved on their sides as at 6 and providing guide ways for a magnifying glass 7 mounted at its edges in the groove 6 for sliding movement longitudinally of said bars.

A pair of reels 8, of any suitable construction, are journaled between the standards 3 at opposite ends of the base plate 1, respectively. A tape 9 of any suitable material, preferably steel, has its opposite ends reversely wound around said reels 8 said tape extending downwardly from said reels around the ends of the base plate 1 and under the latter in a straight run indicated at 10. Preferably the under face of the base plate 1 is grooved as at 11 to form a guideway for the run 10 and so that the latter will seat therein flush with the bottom face of said base plate. Midway of its ends the base plate 1 is provided with a cutout forming a sight opening 12 through which the tape 9 is visible and having straight side edges 13 and open at the front of the base plate 1. The sight opening 12 is an inch wide lengthwise of the base plate 1. The tape 9 is divided by markings or scorings 14, throughout substantially its full length, into inch sections 15, the sections 15 are numbered as at 16 the numbering being consecutive. The sections 15 are marked with graduations 17 corresponding in number to the numbering of the sections.

At each side of the sight opening 12 is a flap 18 hinged to the base plate 1 as at 19 to fold downwardly into the sight opening 12 and thereby restrict the size of the same to the width of a centimeter. Each section 15 is also numbered as at 20 to indicate the number of graduations in the section into which a centimeter is divisible.

In the use of my novel device, in counting threads in inch units of length of cloth, the latter is first spread out upon a flat support. The base plate 1 of the device is then positioned flat upon

the cloth and manipulated, with the aid of the glass 7, until the right hand edge 13 of the sight opening 12 is aligned with a thread. The reels 8 are then manipulated until the scoring 14 of the appropriate scale 15 are aligned with the edges 13 of the sight opening 12 the selection of the scale being made by alignment of the graduations 17 thereof with the threads of the cloth. A comparison count may then be proceeded with in a manner which it is believed will be clear without further explanation.

In counting threads in centimeter units the flaps 18 are folded down into the sight opening 12, otherwise the procedure is substantially the same as described above.

The foregoing is a detailed description of a preferred embodiment of my invention, but it is to be understood that it is illustrative rather than descriptive and that right is herein reserved to changes and modifications falling within the scope of the claims appended hereto.

What I claim is:

1. A device for use in counting threads in cloth and comprising, a flat base plate adapted to be positioned upon the cloth and having a sight opening therein through which the cloth is visible, a pair of reels mounted upon the base plate upon opposite sides of the sight opening, respectively, and a graduated tape having its ends wound upon said reels and a straight run extending across said base and sight opening, said run being guided upon said base for movement across said opening, said tape being divided into predetermined graduated sections with the graduations of each section differently spaced.

2. A device for use in counting threads in cloth and comprising, a flat base plate adapted to be positioned upon the cloth and having a sight opening therein through which the cloth is visible, a pair of reels mounted upon the base plate upon opposite sides of the sight opening, respectively, and a graduated tape having its ends wound upon said reels and a straight run extending across the base and sight opening on the underside of the base and countersunk in said underside flush therewith, said tape being divided into predetermined graduated sections with the graduations of each section differently spaced.

3. A device for use in counting threads in cloth and comprising, a flat base plate adapted to be positioned upon the cloth and having a sight opening therein through which the cloth is vis-

ible, a pair of reels mounted upon the base plate upon opposite sides of the sight opening, respectively, and a tape having its ends wound upon said reels and a straight run extending across said base and sight opening, said tape having markings thereon dividing the same into sections of uniform length each section being differently graduated.

4. A device for use in counting threads in cloth and comprising, a flat base plate adapted to be positioned upon the cloth and having a substantially rectangular sight opening therein through which the cloth is visible, a pair of reels mounted upon the base plate upon opposite sides of the sight opening, respectively, and a tape having its ends wound upon said reels and a straight run extending across said base and sight opening, said tape having markings thereon dividing the same into sections of the same width as that of the sight opening, each section being differently graduated.

5. A device for use in counting threads in cloth and comprising, a flat base plate adapted to be positioned upon the cloth and having a sight opening therein through which the cloth is visible, a pair of reels mounted upon the base plate upon opposite sides of the sight opening, respectively, and a tape having its ends wound upon said reels and a straight run extending across said base and sight opening, said tape having markings thereon dividing the same into sections of uniform length, said sections being numbered consecutively and provided with graduations corresponding in number to the numbering of said sections.

6. A device for use in counting threads in cloth and comprising, a flat base plate adapted to be positioned upon the cloth and having a substantially rectangular sight opening therein through which the cloth is visible, a pair of reels mounted upon the base plate upon opposite sides of said opening, respectively, a tape having its ends wound upon said reels and a straight run extending across said base and sight opening, said tape having markings thereon dividing the same into differently graduated sections of the same width as that of the sight opening, and a pair of flaps hinged to the base upon opposite sides of the sight opening, respectively, and foldable into said sight opening to restrict the width thereof.

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