(No Model.) 2 Sheets—Sheet 1.

A. PETTENKOFER.

KINETOSCOPE.

No. 571,496. Patented Nov. 17, 1896.

Fig. 1.

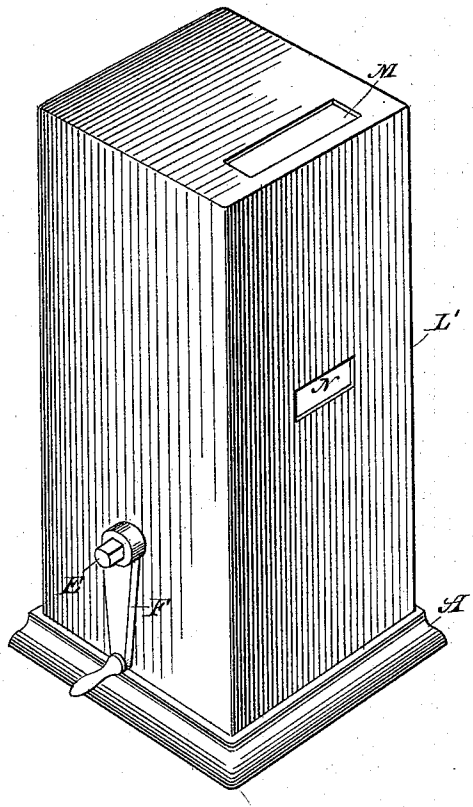


Fig. 2.

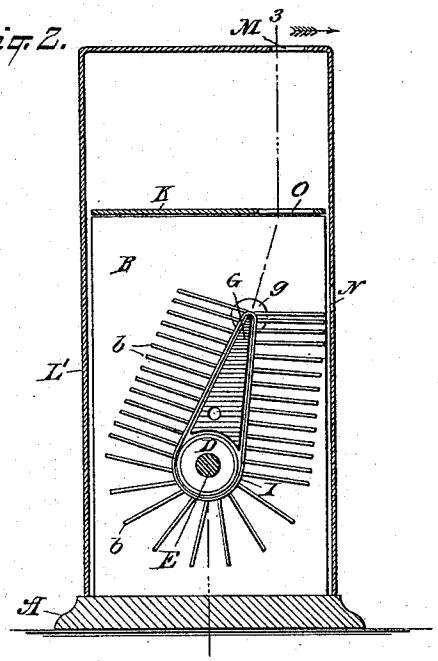


Fig. 3.

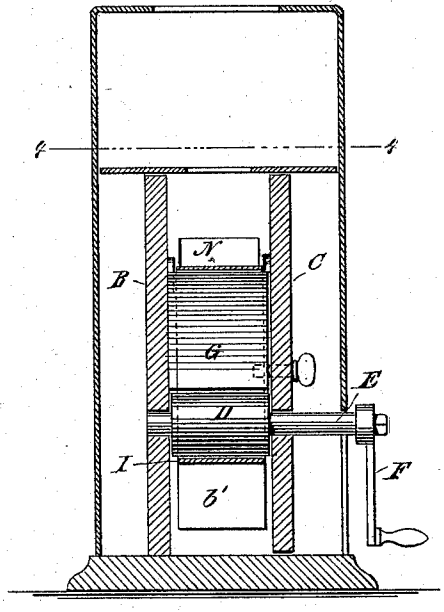


Fig. 4.

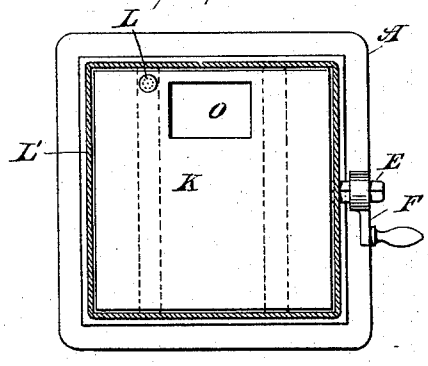
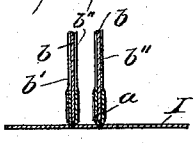


Fig. 7.



WITNESSES:

William P. Goebel.

John F. Flagg.

INVENTOR

Adolph Pettenkofer

BY Geo. Gook.

ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

A. PETTENKOFER.

KINETOSCOPE.

No. 571,496. Patented Nov. 17, 1896.

Fig. 8.

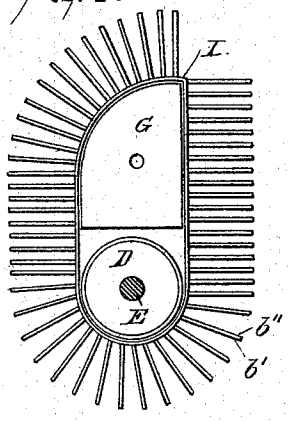


Fig. 8.

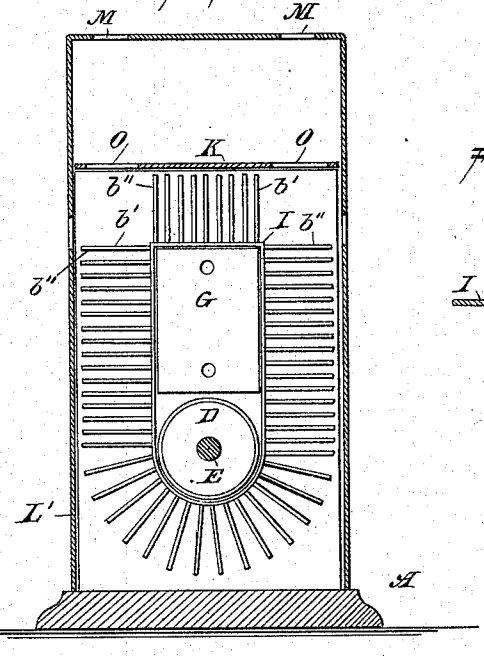


Fig. 5.

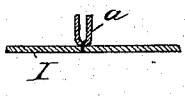


Fig. 5.

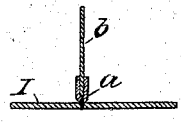
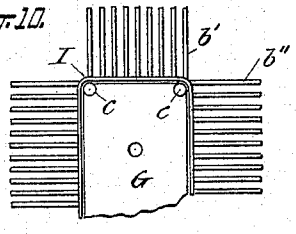


Fig. 10.



WITNESSES:

William P. Gaebel.

John P. Flagg.

INVENTOR

Adolph Pettenkofer

BY George Cook.

ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ADOLPH PETTENKOFER, OF BROOKLYN, NEW YORK.

KINETOSCOPE.

SPECIFICATION forming part of Letters Patent No. 571,496, dated November 17, 1896.

Application filed January 22, 1896. Serial No. 576,425. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH PETTENKOFER, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Kinetoscopes, of which the following is a specification.

My invention relates to an improvement in kinetoscopes, the object of the same being to provide a device of this kind which shall be far more simple and economical to manufacture than those now in use, and which shall be capable of exhibiting a greater number of pictures in a smaller compass or structure than has heretofore been possible.

With these and other ends in view my invention consists in certain novel features of construction and combination of parts, as will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved kinetoscope. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a sectional view taken on the line 4 4 of Fig. 3. Figs. 5, 6, and 7 are detail views showing the manner of attaching the pictures to the tape. Figs. 8, 9, and 10, are views of modifications.

Referring to the drawings, A represents a base or platform made of wood or other desired material, and to which is permanently secured the upright support or partition B, and to which is also detachably secured the support C. Between these supports B C is located a roller D, mounted upon and secured to a shaft E, the latter being supported by the uprights B C, said shaft and roller being revolved by any suitable means, the drawings in the present instance showing a crank F, secured to the shaft near its outer end for turning the latter by hand. Between the supports B C and secured to said stationary support B is located the guide-block G, over and around which travels an endless belt or tape I, hereinafter referred to.

Across the tops of the partitions B C is placed a diaphragm K, the same being pivoted by means of a pin or tack L, Fig. 4, to the stationary partition B, this arrangement allowing said diaphragm to be swung around on said pivot L when desired.

Surrounding the structure above described is an outer casing or box L′, which is removably secured to the base A, said casing being provided in its upper end with an opening M, through which the pictures are viewed, and in its side with an opening N, the former opening M being located above and in line with an opening O, formed in the partition or diaphragm K, said opening N being provided for the purpose of affording light to the pictures.

Around the roller D and the block G passes the endless belt or tape I, made of cloth, fabric, or other flexible material, disks of cardboard or other material *g* being secured to the partitions B C to keep the tape in position on said block. The function of said tape is to carry the photographs or pictures, the latter being preferably secured thereto as follows: To the flexible tape I are stitched or otherwise secured the pieces of fabric *a*, Fig. 5, formed of fabric or other desired material, and between the two flaps of each of which is gummed or cemented a piece of cardboard *b*, Fig. 6, on which latter and on either one or both sides thereof are placed the photographs or pictures *b′ b″*, Fig. 7. In traveling over the block G these pictures extend outwardly from the tape I at substantially right angles, and upon arriving at the extreme end of said block are carried over a sharp angle or shoulder formed on the latter, causing said pictures in succession to quickly swing or flap from one direction to the opposite, as shown in Fig. 2 of the drawings. The shoulder or sharp corner on the block G is formed at a point opposite to the window or opening N, formed in the casing L′, in order that the light entering through said window will not fall upon the picture until it is in substantially a horizontal position or in such position as it is to be viewed. If desired, instead of making the block G of the shape shown in Fig. 2 it might be constructed as shown in Fig. 8, that is, having one side rounded and the opposite side straight, forming the sharp turn or angle at the extreme upper end thereof. Again, if desired, the block may be rectangular in form, as shown in Fig. 9, having two upper sharp turns or corners and two straight vertical sides, causing the pictures to be in substantially a horizontal position when

traveling up and down the two vertical sides of said block. In this instance the diaphragm K will be provided with two openings O O, as well as the upper end of the casing L′, as shown at M M. By means of this construction two series of pictures or photographs may be exhibited in the one structure, as by viewing the same through one opening one series of pictures *b′* will be seen and those on the opposite side *b″* seen when looking through the opposite opening in the casing.

Again, if desired, small rollers *c* may be secured in the upper ends of the block G, as shown in Fig. 10, for preventing wear on the tape when passing around the corners thereof.

It will be understood from the above description that my invention is exceedingly simple in construction; that by reason of the arrangement of the pictures or photographs upon the tape a large number thereof can be utilized, as it is possible to secure them at short intervals on the tape, thus requiring a much shorter belt or tape than when the pictures are imprinted directly thereon; that large pictures may be used without increasing the length of the tape; that by reason of the arrangements of the openings in the outer casing no light is admitted to the interior, excepting that which falls directly upon the photograph or picture as it comes opposite the window or opening N, said light only falling upon said picture when the latter is in a horizontal position and after it swings over or beyond the sharp corner or angle formed on the block G; in other words, no traveling movement of the picture will be seen, nor will the picture itself be seen until in its proper position opposite the said window N, the diaphragm K cutting off all view of the tape and pictures excepting the particular picture opposite said window N, and that by reason of the tape traveling over the sharp corner or angle of the block G the movement of the several pictures to their proper position is practically instantaneous.

It will be understood that by removing the outer casing L′, the partition C, and swinging the diaphragm K around upon its pivot the tape or belt to which the pictures are secured may be easily and readily removed and another tape substituted therefor, carrying another or different set of pictures.

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

1. In a kinetoscope the combination with a roller, of a stationary block having a sharp turn or angle thereon, and an endless belt or tape traveling around said roller and block, and having a series of pictures secured thereto, substantially as described.

2. A kinetoscope constructed with a stationary block having a sharp angle or shoulder formed thereon and an endless belt adapted to travel around said block and over said angle, and pictures secured at one end to said tape or belt, and extending at an angle therefrom, substantially as described.

3. A kinetoscope containing a roller a stationary block having a sharp corner or edges thereon, an endless belt traveling over and around said block and roller, and a series of pictures secured at one end to said tape or belt and extending at an angle therefrom, substantially as described.

4. In a kinetoscope, the combination with a suitable frame, of a roller secured thereto a stationary block formed with a sharp turn and secured to said frame, an endless belt carrying a series of pictures traveling around said roller and block, and an outer casing having a window or opening therein opposite to said sharp turn on said block and with an opening therein for viewing said pictures substantially as described.

5. In a kinetoscope the combination with a suitable frame, of a traveling endless belt having pictures secured at one end thereto, and extending at an angle therefrom, an outer casing covering said framework and provided with an opening for admitting light to said pictures, and with an opening through which to view the same, and a diaphragm contained within said outer casing, and provided with an opening in alinement with the latter opening, substantially as described.

Signed at New York, in the county of New York and State of New York, this 20th day of January, A. D. 1896.

ADOLPH PETTENKOFER.

Witnesses:
GEORGE COOK,
JOHN F. FLAGG.