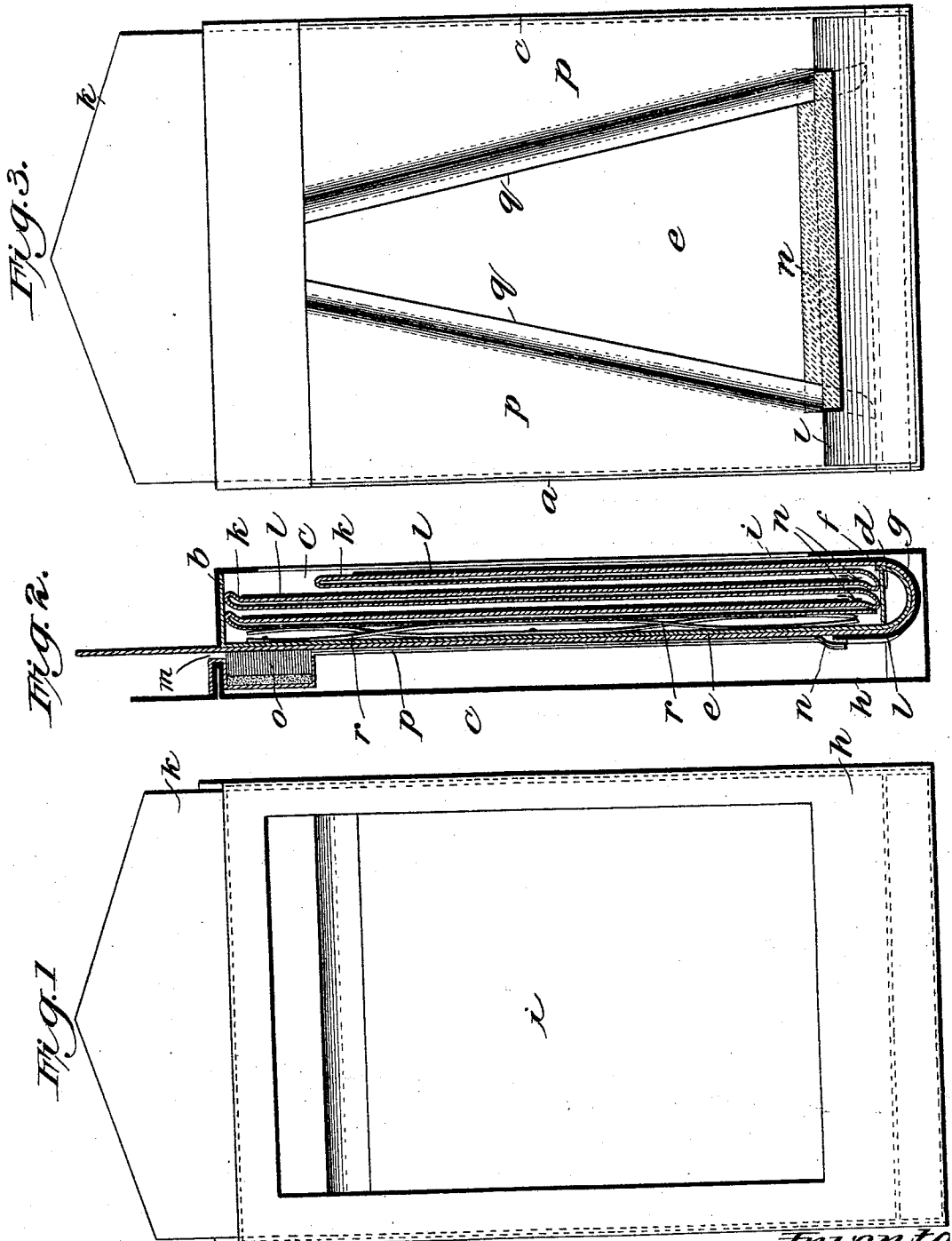


J. G. SCHNEIDER.
 FLAT FILM PACK.
 APPLICATION FILED DEC. 3, 1908.

941,103.

Patented Nov. 23, 1909.



Witnesses:

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JOCHANN GEORG SCHNEIDER, OF WÜRZBURG, GERMANY.

FLAT FILM-PACK.

941,103.

Specification of Letters Patent. . . Patented Nov. 23, 1909.

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To all whom it may concern:

Be it known that I, JOCHANN GEORG SCHNEIDER, subject of the German Emperor, residing at Würzburg, in the Empire of Germany, have invented certain new and useful Improvements in Flat Film-Packs, of which the following is a specification.

This invention relates to flat film packs, and is preferable to the ordinary arrangements of this kind in that when the films are being changed the slipping of the carrying band on the former is avoided, and the separate films are separated from the carrying band not only in a correct succession, but are delivered independently merely by pulling the end of the carrying band.

An arrangement adapted for carrying out this object is shown in the accompanying drawings in Figures 1-3. Fig. 1 is a front view; Fig. 2, a vertical cross section of the same; and Fig. 3, an interior view of the film container or holder.

The pack consists substantially of a sheet-metal box, the sides *a b c* of which, with the exception of the lower cross partition *d*, project on both sides beyond the bottom of the box *e*. The lower transverse wall *d* only rises above the front side of the bottom *e* of the box and its free end is formed as a stop *f* serving as a retaining device, and its lower downwardly turned outer face is provided with a curve or pad *g*, which is semicircular in section. The box *a b c d e* is inclosed in a prismatic case *h* formed of paper or cardboard, which has a rectangular recess *i* at the front. The film carrier is inserted in the sheet metal box. This film carrier consists of an alternately folded band of black paper *k* and is sub-divided by the folds into separate sheets lying one upon the other. Each such sheet is connected with the one below it by its upper transverse edges, and with the one situated above it by its lower transverse edge. The separate films *l* are so arranged on the film carrying band *k* that they lie between each two sheets or folds of the film carrier *k*, and are attached to the rearmost sheet of the two by the edge near the bottom fold, by means of the paper strips *n*.

The film carrying band *k*, is folded, in the manner shown in Fig. 2, alternately and is passed around the bent sheet metal piece *g* and carried along the back of the box to the outside, through a slot *m* provided in the cross wall *b* of the sheet metal box. In con-

sequence of this alternate folding of the carrying band, the sheets of the film carrying band *k*, which sheets are connected at their upper end along one folding edge, project somewhat to the front, and therefore a tendency to turn is given to the upper ends of the separate sheets, when the carrying band, which projects beyond the packet, is pulled, whereby the film carrier strip lying in front is always rolled from its upper edge and drawn without friction over the film lying beneath it. By the film carrying band being somewhat doubled backward at its lower folded edge, the separate sheets engage one beneath the other and yet enable the foremost strip of the film carrying band to be easily drawn off over the bar *f*, which secures the carrying band in its position without carrying with it the next film.

In order to securely close the slot *m* against the penetration of light, a brush *o* is arranged inside the slot *m*, the bristles of which brush bear against the rear side of the bottom *e* of the box or against the band of film, and thereby prevent the entrance of light. Two flat knives *p* are arranged at a distance from the bottom *d* of the box corresponding approximately to the thickness of the film carrying band, the cutting edges *q* of which knives approach one another at the top and are adapted to separate the exposed films from the film carrying band. In order to allow of this, the strips of paper *n* connecting the films *l* to the film carrier *k*, are only of a length which is somewhat smaller than the clear distance between the knife blades at the lower ends of the knives. Consequently when the end of the film carrying band which projects beyond the pack is pulled, the film *l* which is each time to be drawn out, is moved behind the knives, while the carrying band *k* moves in front of the knives, whereby the paper strips *n* are cut by means of the knife blades. The films thus separated remain in the space behind the bottom *e* of the box and are pushed by the succeeding films against the rear side of the paper cover *h*. In order that the film carrying band *k* may always bear on the front wall of the paper cover or box *h*, which is provided with the aperture or window *i*, springs *r* are provided on the bottom *d* of the sheet-metal box *a b c d e*, which springs press the folded carrying band to the front.

The flat film pack hereinbefore described,

has, in addition to the advantages mentioned at the commencement of this specification, also the substantial advantage that only one end of the carrying band projects
5 beyond the package and consequently the drawing out of more than one film is avoided.

I declare that what I claim is:—

1. In a flat film pack, consisting in combination of an alternately folded film carrying
10 band, narrow strips for attaching films to said carrier band, a semi-circular pad on the lower transverse wall of the pack, a hooked edge for said pad, an intermediate
15 wall in said pack, a cutting device on said wall adapted to separate the films from said carrier band and store them in said pack substantially as specified.

2. In a flat film pack consisting in combination of an alternately folded film carrier
20 band, narrow strips to attach films to said carrier band, a semi-circular pad on the lower transverse wall of the pack, two flat

blades in said pack having the cutting edges converging and facing each other, and
25 adapted to separate the films from the carrier band substantially as specified.

3. In a flat film pack consisting in combination of a film carrier band, an intermediate wall in said pack, two flat blades having
30 the cutting edges converging and facing each other, on said intermediate wall, a means to move said band into such engagement with said cutting edges as to separate
35 the films therefrom and store them in said pack and means for holding said carrier band to the front of said pack substantially as specified.

In testimony whereof I have signed my name to this specification in the presence
40 of two subscribing witnesses.

JOHANN GEORG SCHNEIDER.

Witnesses:

WILHELM DÜLL,
ANTON HAIDER.