

No. 714,601.

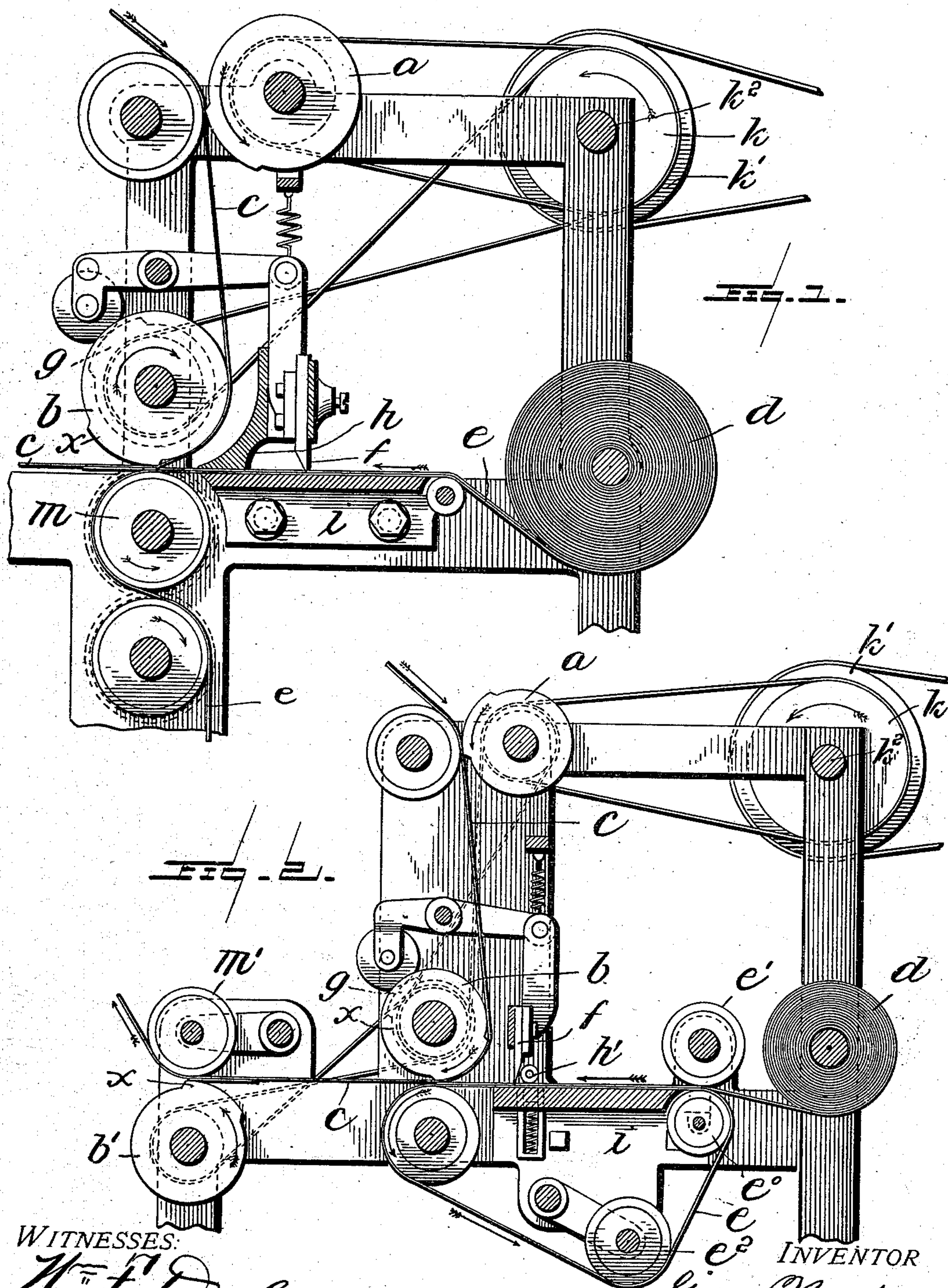
Patented Nov. 25, 1902.

G. NAST.

APPLYING CORK STRIPS TO CIGARETTE PAPER.

(Application filed Sept. 26, 1902.)

(No Model.)



WITNESSES:

*W. F. Doyle.*  
*R. D. Smith.*

INVENTOR

*Georg Nast*

BY *Max Georgie*  
his Attorney



# UNITED STATES PATENT OFFICE.

GEORG NAST, OF MUNICH, GERMANY.

## APPLYING CORK STRIPS TO CIGARETTE-PAPER.

SPECIFICATION forming part of Letters Patent No. 714,601, dated November 25, 1902.

Application filed September 26, 1902. Serial No. 124,949. (No model.)

*To all whom it may concern:*

Be it known that I, GEORG NAST, ingénieur, a citizen of Prussia, residing at Blumenburgstrasse 20, Munich, Bavaria, Germany, have  
5 invented certain new and useful Improvements in Applying Cork Strips to Cigarette-Paper; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled  
10 in the art to which it appertains to make and use the same.

The present invention relates to a device for applying cork strips to a cigarette-paper strip at suitable intervals, in which the pieces  
15 of cork are partially severed from the strip and guided on the way to the rolls for applying the same to the paper strip, so that they shall be applied to the said strip in proper position and exactly at that part of the same  
20 which has previously been provided with an adhesive, the next following piece of cork being retained in proper position during this operation.

In order to render the present specification  
25 easily intelligible, reference is had to the accompanying drawings, in which like letters of reference indicate similar parts throughout.

Figure 1 is a side elevation of such parts of the apparatus as are necessary for the proper  
30 understanding of one embodiment of the invention, and Fig. 2 is a similar view of a modified form of the same.

In both embodiments the strip *c* of cigarette-paper is guided between the pressure-  
35 rolls *b m* in front of the table *i*, the said strip having been previously provided with an adhesive at suitable intervals by means of the roll *a*. This latter mechanism is known and forms no part of the present invention. The  
40 rolls *a* and *b* are run at the same speed in opposite directions by means of suitable connections through the pulleys *k* and *k'*, mounted on the shaft *k*<sup>2</sup>. The cork strip is taken from  
45 the roll *d* in a band *e* of paper wound with the cork strip on the said roll and is fed over the table *i* to and below the paper strip *c* and with it to the rolls *b m*. The band *e* is drawn downward between the roll *m* and a lower roll  
50 after effecting the transfer of the cork strip to the rolls *b m*.

The detachment of each piece of cork which has previously been partially severed by the

cutter *f* is completed by the coöperation of the roll *m* with the raised face *x* of the roll *b* rotating in the opposite direction. In Fig. 1  
55 the severing is effected by these two rolls drawing in the next piece of cork, while the piece next but one, which has been partially severed by the cutter *f*, is retained by a presser-foot *h* on the table *i* and thus the  
60 total severance prevented for the time being. The face *x* also presses the cork slip or piece against that part of the cigarette-paper strip provided with the adhesive. The cutter *f* and the presser-foot *h* are depressed at the proper  
65 moment by means of a cam *g*. While the foot *h* holds the piece of cork down on the table *i*, the cutter *f* makes an incision about two-thirds of the thickness of the cork strip in order  
70 to partially sever the next section or length. This incision enables each length to be properly detached subsequently, leaving smooth edges. The operation of the presser-foot prevents the cork strip from curling up and in-  
75 sures the cutting of exactly the proper length each time. The partially-severed length of cork is not released by the foot *h* until the face *x* of the roll *b* again comes around and, coöperating with roll *m*, draws the cork piece  
80 between the said rolls. The lower roll *m* of itself exercises no upward pressure on the cork piece, since this roll is cylindrical and has no raised face. The arrangement of the  
85 raised face *x* on the roll *b* above the strip *c* and behind the paper strip *c* necessitates the arrangement of the raised face of the roll *a* alternately of the face *x*, so that the two faces  
90 operate alternately on the strip *c* and not simultaneously. This is necessary in order to prevent the face *x* from tearing the paper strip, which it would do if it were to grip the  
95 same while the face of the roll *a* was in operation.

In the device described with regard to Fig. 1 a second piece of cork is partially severed  
95 and under the foot *h* while the preceding piece is being detached and applied to the paper *c* by the rolls. In the modification shown in Fig. 2 the foot *h* is omitted and the  
100 working of the apparatus rendered more simple by shifting the cutter *f* nearer to the rolls *b m* by the length of a cork piece, so that the said cutter will partially sever the length of cork which is required for immediate use by



the rolls *b m*, the incision taking place at the moment the front end of the piece of cork is gripped by the rolls. Thus the necessity of the presser-foot is obviated, and a roll *h'* may be substituted for the same, said roll being mounted on the table at the immediate rear of the cutter *f* and serving to hold the end of the cork strip flat down on the table. This has the additional advantage that the end of the cork strip cannot be carried upwardly by the ascending cutter, which might possibly happen in the case of the device illustrated in Fig. 1.

In the device shown in Fig. 2 in order to obviate the necessity of having a transporting-band of paper wound upon the cork roll *d* an endless band *e'* for the support of the cork is provided running over roll *m* and guide-rolls *e<sup>0</sup>* and *e<sup>2</sup>*, the latter of which is adjustable to enable the said band to be tightened up at will. In order to properly press the cork onto the paper strip, a second supplemental pair of rolls *m' b'* may be employed, the latter of which has a raised face *x'* to press the cork onto the paper strip.

I claim as my invention—

1. A device for applying strips of cork to a continuous strip of cigarette-paper at suitable intervals, consisting of a table onto which the end of a strip of cork coming from a roll of cork is fed, means for holding the end of the said strip down on the table, means for making an incision in the said strip at a point equal to the length to be detached, and a pair of rolls, one having a raised face, between which said rolls the cigarette-paper strip, previously provided with an adhesive at certain points, is fed, the said raised face being timed to cooperate with the second roll and grip, cut and press the detached piece of cork onto the adhesive of the paper strip substantially as described.

2. A device for applying strips of cork to a continuous strip of cigarette-paper at suitable intervals, consisting of a table onto which the end of a strip of cork coming from a roll of cork is fed, a roll to depress the end of the said strip down on the table, means for making an incision in the said strip at a point equal

to the length to be detached, and a pair of rolls, one having a raised face, between which said rolls the cigarette-paper strip, previously provided with an adhesive at certain points, is fed, the said raised face being timed to cooperate with the second roll and grip, cut and press the detached piece of cork onto the adhesive of the paper strip substantially as described.

3. A device for applying strips of cork to a continuous strip of cigarette-paper at suitable intervals, consisting of a table onto which the end of a strip of cork coming from a roll of cork is fed, a roll to depress the end of the said strip down on the table, a reciprocatory cutter for making an incision in the said strip at a point equal to the length to be detached, and a pair of rolls, one having a raised face, between which said rolls the cigarette-paper strip, previously provided with an adhesive at certain points, is fed, the said raised face being timed to cooperate with the second roll and grip, cut and press the detached piece of cork onto the adhesive of the paper strip substantially as described.

4. A device for applying strips of cork to a continuous strip of cigarette-paper at suitable intervals, consisting of a table, a roll of cork mounted in proximity thereto, an endless band to feed the end of the same to the said table, means for holding the end of the said strip down on the table, means for making an incision in the said strip at a point equal to the length to be detached and a pair of rolls, one having a raised face, between which said rolls the cigarette-paper strip, previously provided with an adhesive at certain points, is fed, the said raised face being timed to cooperate with the second roll and grip, cut and press the detached piece of cork onto the adhesive of the paper strip substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORG NAST.

Witnesses:

HENRY R. MCGINNIS,  
CLARA I. PARKER.