

(No Model.)

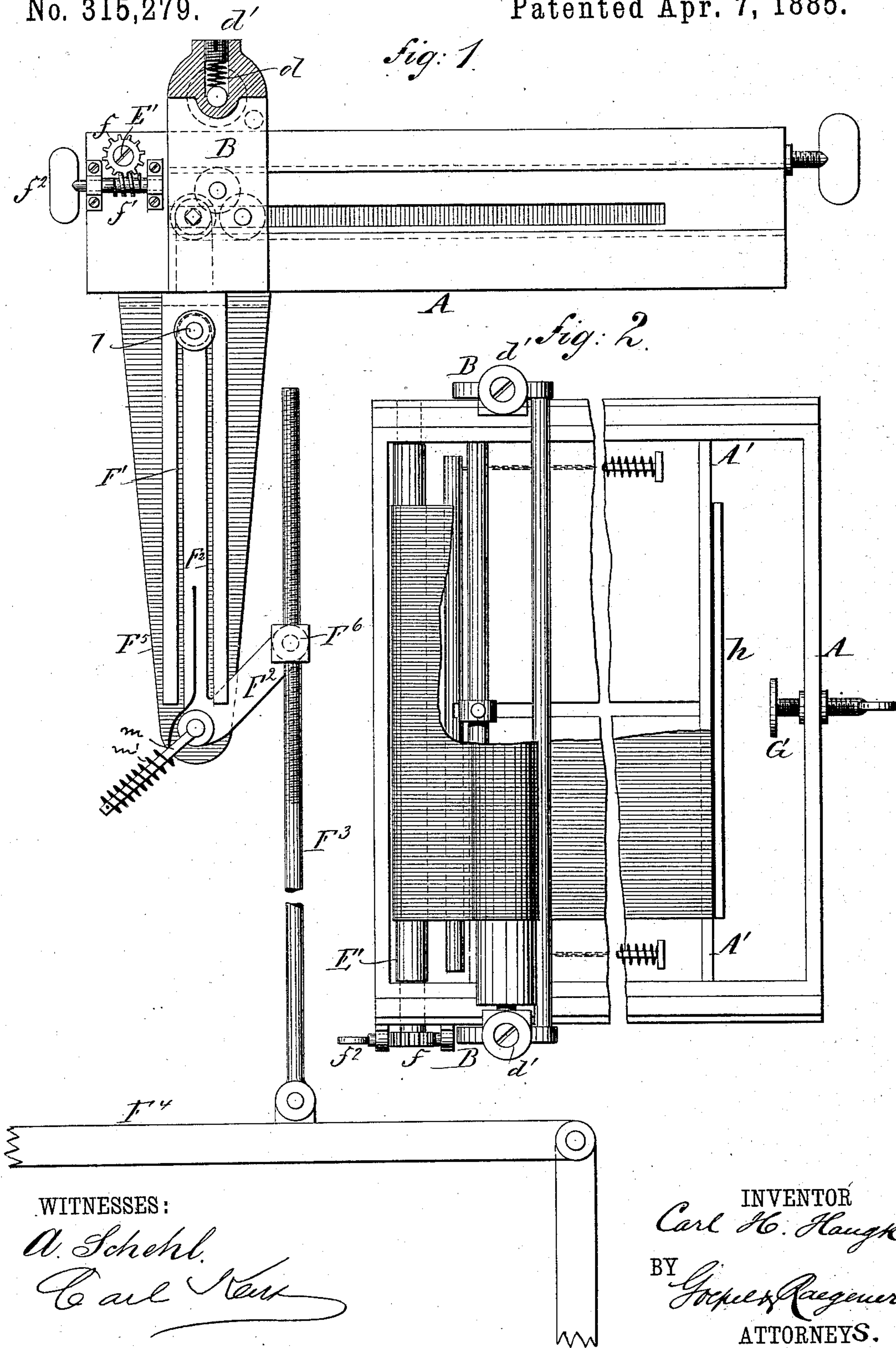
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C. H. HAUGK.

CIGAR BUNCHING MACHINE.

No. 315,279.

Patented Apr. 7, 1885.



(No Model.)

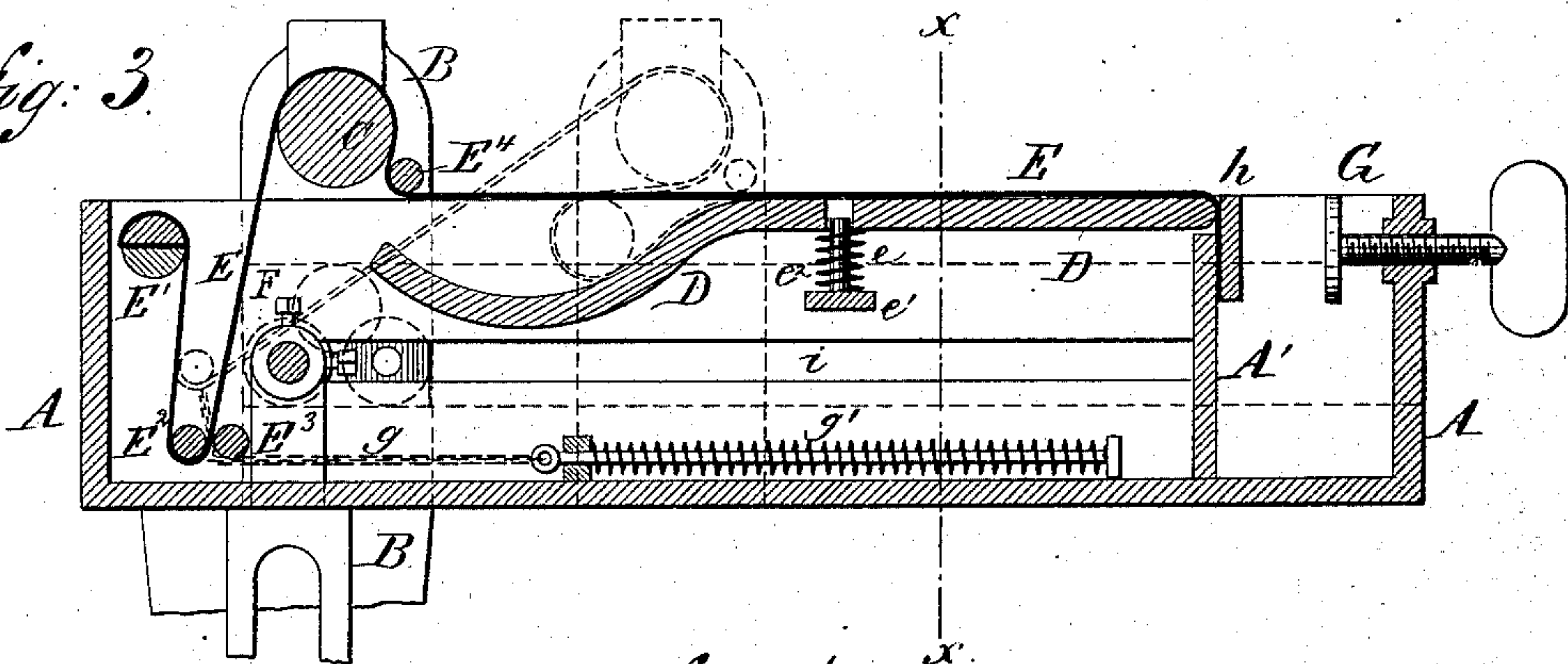
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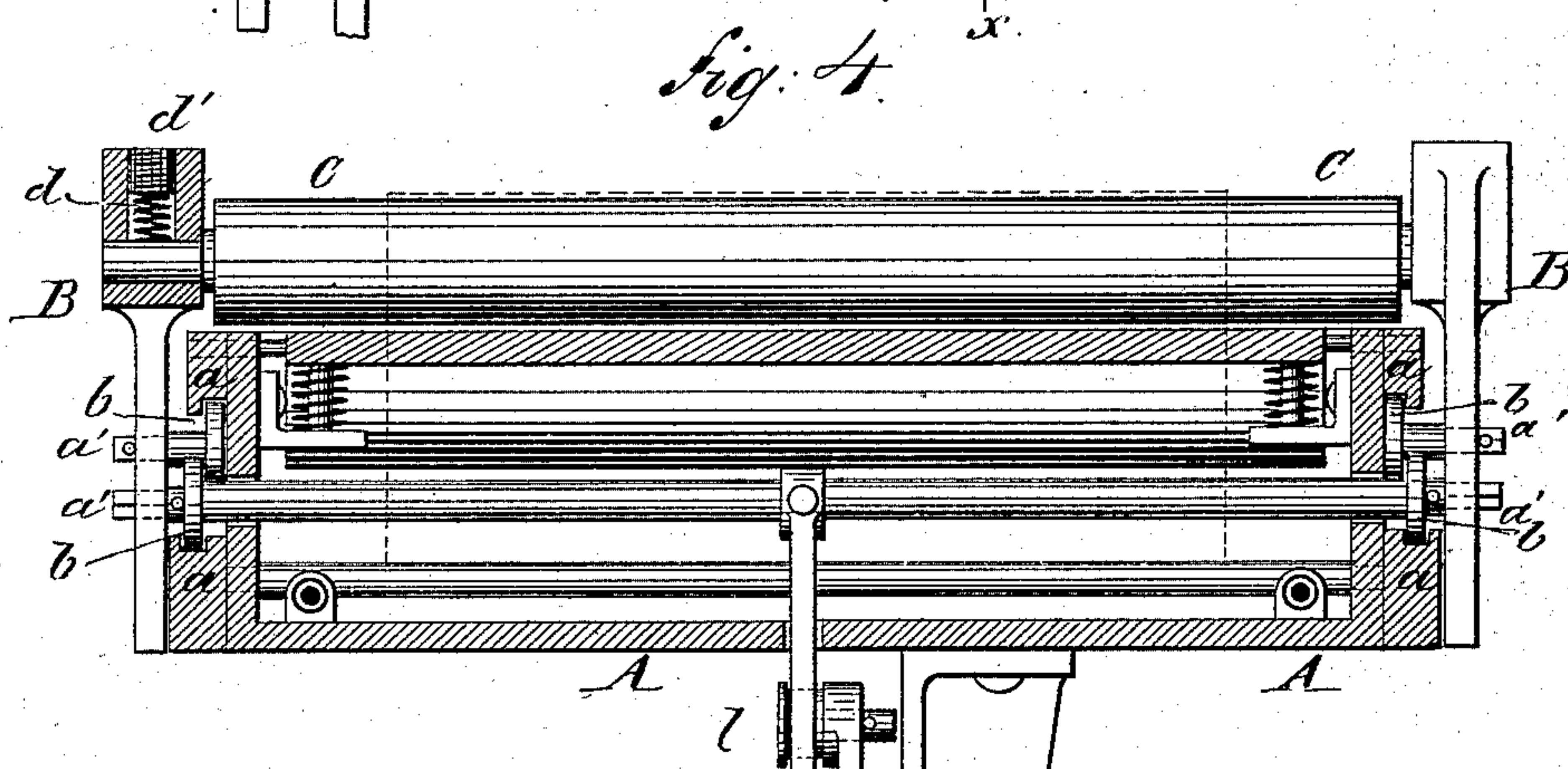
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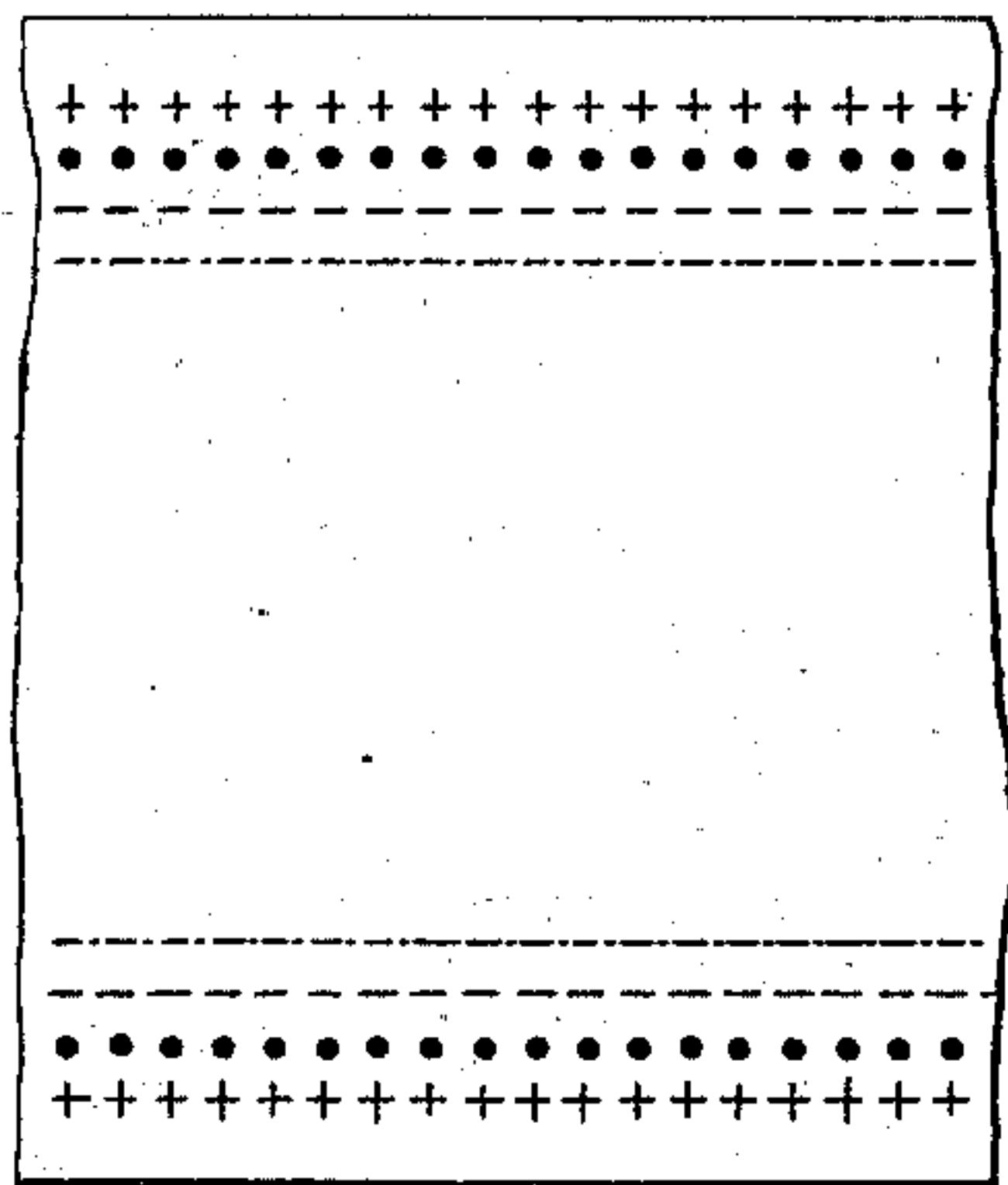
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



WITNESSES:

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BY

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# UNITED STATES PATENT OFFICE.

CARL HEINRICH HAUGK, OF BROOKLYN, NEW YORK, ASSIGNOR OF TWO-THIRDS TO CARL VOGT AND CHARLES VOGT, BOTH OF SAME PLACE.

## CIGAR-BUNCHING MACHINE.

SPECIFICATION forming part of Letters Patent No 315,279, dated April 7, 1885.

Application filed August 16, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CARL H. HAUGK, of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Cigar-Bunching Machines, of which the following is a specification.

This invention has reference to cigar-machines for rolling the bunches in imitation of hand-made bunches.

In the accompanying drawings, Figure 1 represents a side elevation of my improved machine for rolling cigar-bunches. Fig. 2 is a plan thereof with parts broken away; Fig. 3, a vertical longitudinal section; Fig. 4, a vertical transverse section on line *x x*, Fig. 3; and Fig. 5 is a plan of the rolling band and apron, showing the gage-marks thereon.

Similar letters of reference indicate corresponding parts on all the figures.

A in the drawings represents the frame of my improved machine for rolling cigar-bunches, which is nearly square in shape, and is designed to rest on a table or other suitable support. A horizontally-reciprocating carriage, B, is supported in ways *a a* of the said walls of the frame A by means of anti-friction rollers *b b*, applied to fixed shafts *a'* of the upright standards of the carriage B. The standards of the carriage B are provided at their upper ends with sockets in which the pressure-roller C has its bearings. The journals of the pressure-roller C are acted upon by the strong spiral springs *d*, that are retained in the sockets of the standards by screw-plugs *d'*, as shown in Figs. 1 and 4. A partition-wall, A', extends transversely across the frame A, near the rear end thereof. A table, D, curved or trough-shaped at its front end, is hinged at its rear end to said partition-wall, and supported near its center by a spring-cushioning device, whereby it is adapted to yield under pressure. The cushioning device consists of vertical pins *e* attached to brackets *e'*, and projecting into holes in the table, and spiral springs *e''* surrounding said pins between the table and the brackets. A rolling band or apron, E, of canvas or other suitable material, is attached at its front end to a transverse roller, E', at the front part of the frame A, said roller E' being axially adjustable to vary the tension of the

band by means of a gear-wheel, *f*, at one end of its shaft, said gear-wheel being engaged by a worm-gear, *f'*, which turns in bearings attached to the frame A, and that is provided with a thumb-nut, *f''*, as shown in Fig. 1. The rolling-band E passes downward from the roller E' over a transverse tension-rod, E<sup>2</sup>, which is connected at its ends to chains *g*, that are attached to guided and spring-cushioned rods *g'*. The chains *g* are guided along a fixed transverse rod, E<sup>3</sup>. From the tension-rod E<sup>2</sup> the rolling-band is passed in upward direction over the roller C, then below the smaller transverse roller E<sup>4</sup> of the carriage B, at a level with the horizontal portion of the table D, to the end of said table, and thence downward over the partition A', to which its rear end is rigidly attached by a fixed strip, *h*. A transverse shaft, F, having its bearings in the standards of the carriage, moves with the carriage through longitudinal slots *i* in the frame A. Two of the friction-rolls *b* are fixed to the ends of this shaft, and a downward-extending vertically slotted or forked arm, F', is applied to the center thereof. A fixed arm or hanger, F<sup>5</sup>, depends from the under side of the frame A, or its supporting-bench, and an angular lever, F<sup>2</sup>, is pivoted at the lower end of said hanger. The short arm of this lever is connected to a lever, F<sup>3</sup>, which latter is connected to an actuating-lever, F<sup>4</sup>, designed to be connected to a treadle. The upright end of the long arm of said angular lever is provided with a short flanged roller or knob, *l*, which projects into the vertical slot of the arm F'. The lever F<sup>2</sup> is provided opposite its short arm with a short rod, *m*, inclined downward, around which is coiled a spiral spring, *m'*, the upper end of which is extended upward and attached to the long arm of said lever. The tension of the spring tends to hold the lever so that its long arm is normally in an upright position. When the treadle is depressed, the carriage B is moved backward over the table D to the rear end thereof by the action of the lever upon the slotted arm of the carriage, and when the treadle is released the carriage is returned to its normal position at the front end of the frame by the action of said parts under the in-



fluence of the spring  $m'$ . The connection of the rod  $F^3$  with the short arm of the angular oscillatory lever is effected by means of a stud,  $F^6$ , inserted in said arm, the head of said stud being provided with a screw-threaded hole, through which the upper screw-threaded end of the rod passes. The stroke of the lever, and consequently the traverse of the carriage may be varied by adjusting the stud higher or lower on the rod before connecting it with the lever. The rolling band or apron  $E$  is provided on its face with guide-marks for indicating to the operator the proper positions on the band of the paper wrappers for the different sizes of bunches to be rolled thereon.

The operation is as follows: The tobacco required for the filler and the binder is placed on the rolling-band immediately back of the pressure-roller  $C$ , the wrapping-paper being placed farther to the rear, upon that portion of the rolling-band above the horizontal portion of the table  $D$ . The fingers are then pressed slightly against the ends of the filler and roller and the carriage moved backward on the frame  $A$ , with its spring-cushioned roller  $C$  passing over the table  $D$ , and the filler and binder are rolled up into proper form on the rolling-band between the pressure-roller  $C$  and the trough of the table, as shown in dotted lines in Fig. 3, and then rolled up in the wrapping-paper until the wrapped bunch arrives at the end of the table, where it is delivered by the rolling-band, on the release of the treadle, into a space between the partition  $A'$  and an adjustable clamping-disk,  $G$ , arranged in the end wall of the frame  $A$ . The bunch is held in that position until removed for being placed in the mold. The yielding pressure-roller  $C$ , in connection with the yielding spring-cushioned table  $D$ , imitates, in connection with the rolling-band, the yielding rolling motion imparted by the fingers to the bunch, and produces thereby on the bunching-machine bunches in close imitation of hand-rolled cigars. The degree of pressure to be exerted on the bunches and the adjustment of the rolling-band to the required thickness of the same are regulated by the adjustment of the cushioning-springs of the pressure-roller and the length of the band, which latter is controlled by the axial motion of the roller  $E'$ .

I claim as my invention—

1. In a cigar-bunching machine, the combination of a yielding table, an adjustable rolling band or apron, a reciprocating spring-cushioned pressure-roller, and a spring-actuated tension-rod applied to the rolling-band, substantially as and for the purpose set forth.

2. The combination of the supporting-frame, a yielding table, a reciprocating carriage having a spring-cushioned pressure-roller, a rolling band or apron attached at its front end to an adjustable roller and at the rear end to the supporting-frame, and a spring-actuated tension-rod extending transversely across the rolling-band, substantially as set forth.

3. In a cigar-bunching machine, the combination of a supporting-frame, a rolling-apron connected at both ends thereto, a yielding table, a reciprocating carriage provided with a pressure-roll and adapted to traverse said frame, a slotted arm attached to said carriage and extended downward therefrom, a hanger depending from said frame, a bell-crank lever fulcrumed in said hanger, and an actuating-lever connected to the short arm of said angular lever, the long arm thereof being provided with a projection or roller which plays in the slot of said arm and pushes back the carriage, substantially as set forth.

4. In a cigar-bunching machine, the combination of a supporting-frame, a rolling-apron connected at both ends thereto, a yielding table, a reciprocating carriage provided with a pressure-roll and adapted to traverse said frame, a slotted arm attached to said carriage and extended downward therefrom, a hanger depending from said frame, a bell-crank lever fulcrumed in said hanger, an actuating-lever connected to the short arm of said angular lever, the long arm thereof being provided with a projection or roller which plays in the slot of said arm and pushes back the carriage, and a retracting device whereby the carriage is restored to its normal position, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

CARL HEINRICH HAUGK.

Witnesses:

PAUL GOEPEL,  
SIDNEY MANN.