

C. KORN.
DRESSING LEATHER.

No. 32,629.

Patented June 25, 1861.

Fig 1.

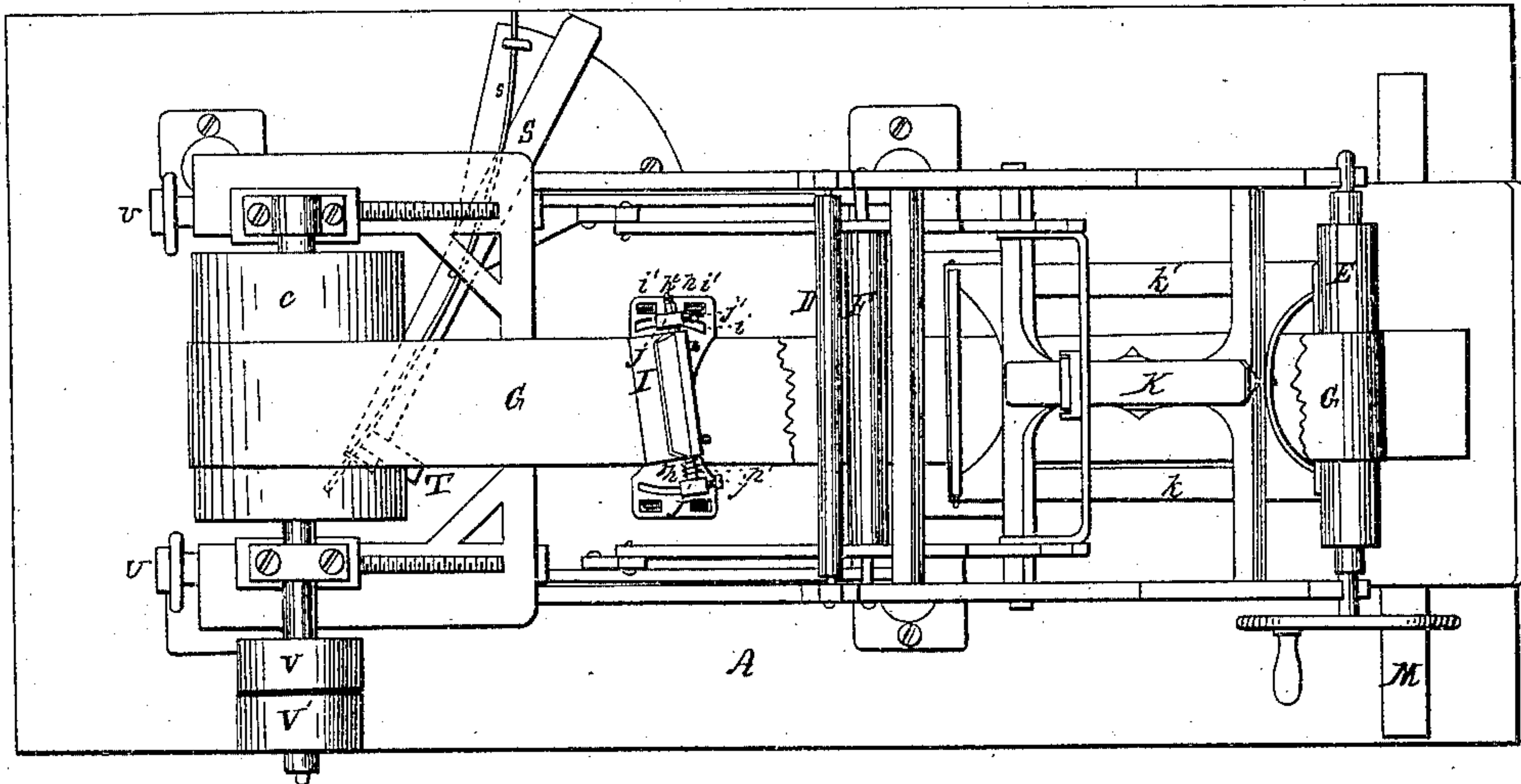
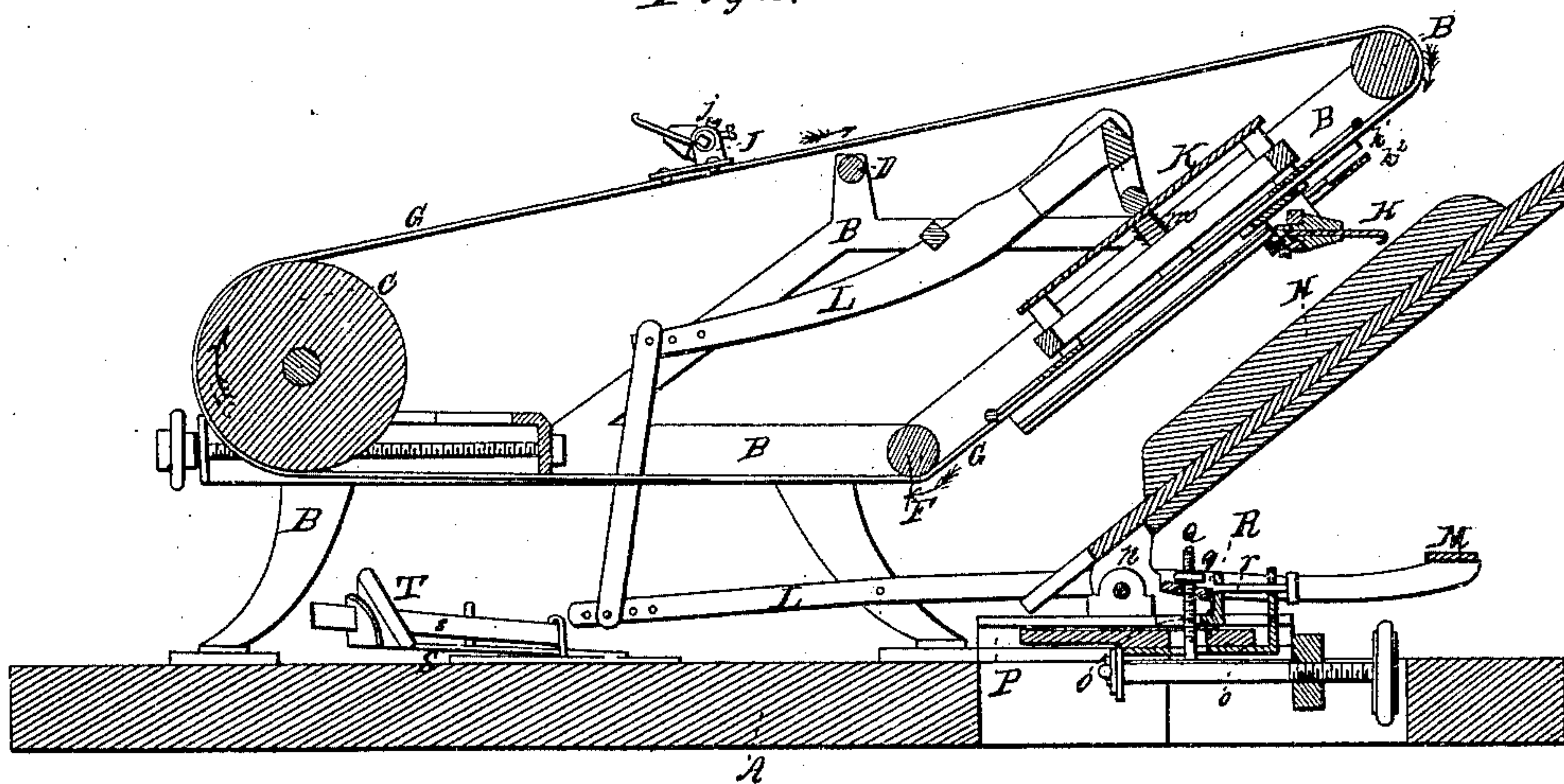


Fig 2.



Witnesses.

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CHARLES KORN, OF MERIDEN, CONNECTICUT.

MACHINE FOR DRESSING LEATHER.

Specification of Letters Patent No. 32,629, dated June 25, 1861.

To all whom it may concern:

Be it known that I, CHARLES KORN, of Meriden, in the county of New Haven and State of Connecticut, have invented certain
5 new and useful Improvements in Machines for Dressing Leather; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings,
10 making part of this specification, in which—

Figure 1, is a plan of my improved machine. Fig. 2, is a vertical longitudinal section of the same.

Similar letters of reference in both figures
15 indicate corresponding parts.

The invention consists 1st, in devices employed to guide and govern a series of knives or scrapers attached to an endless belt. 2nd, in a device for clearing the knives
20 during their continuous rotation. 3rd, in devices for adjusting the position and angle of the bench on which the leather is placed to be dressed.

To enable others skilled in the art to make
25 and use my invention I will proceed to describe its construction and operation.

A, is the bed of the machine.

B, is a frame in which are journaled a drum C, and a number of rollers D, E, F,
30 around which is stretched an endless belt G, carrying knives H, which are formed as shown in Fig. 2, and secured to the belt by the following means.

I, is a knife frame, projecting laterally on
35 each side of the belt G, and secured thereto by screws set in a direct line across the belt in order to preserve the freedom of the latter in passing around the rollers and at the same time hold the knife frame firmly in
40 position. The said frame is provided at each end with a segmental slot i , and two rollers i' .

J, J, are ears clamped adjustably in the slots i , i , in order to set the knife at any
45 horizontal angle desired. The knife back is formed of a pair of clamping jaws inclosed by a metallic strap which strap is provided with square gudgeons h , h' , fitted to slide freely through square holes in bushes j ,
50 within the ears J. The said bushes are fitted to turn freely, in the ears but may be held by means of set screws j , j' , so as to secure the knife at any vertical angle desired.

h^4 , are screws employed to force apart the
55 rear edges of the clamp jaws and thus secure the blade.

Two, three or more of these knives are set at equal distances around the belt in each machine. The knives are held to their work by a presser K, formed with guides k , k' ,
60 to receive and guide the ends of the knife frame and depressed with greater or less force by means of a system of levers L, operated by a treadle M.

m , is a spiral spring which raises the
65 presser when the treadle is released.

k^2 , is an oblique flange or cam projecting downward from the guide k' .

h^2 , is a caster roller projecting from the gudgeon h , of the knife. The said roller
70 coming in contact with the cam flange k^2 , imparts an endwise motion to the knife transversely of the machine while acting on the leather in order to produce a drawing
75 cut.

h^3 , is a spiral spring which restores the knife to its former position in its frame when released by the flange k^2 .

The leather to be dressed is placed upon a bench N, set parallel or nearly so with the
80 presser K. The said bench is secured to a knee n , pivoted to a slide O, which slide is guided in ways P, and moved backward or forward by means of a set screw o , in order
85 to place the bench at any desired distance from the presser.

Q, is a screw bolt passing upward from the slide O, through the lower member of the knee and provided with a nut q , to control the upward movement of the knee.
90

R, is a wedge adapted to slide beneath the knee and advanced or retracted by a rod r . By means of the wedge R and nut q , the bench N, is secured at any desired angle.

S, is a bar pivoted adjustably to the bed
95 of the machine and carrying a piece of leather or other suitable substance T, for the purpose of cleaning the knives at every revolution.

s , is a spring acting to press the bar S, for-
100 ward.

U, U, are a pair of set screws applied to the bearings of the drum C, for the purpose of tightening the belt.

V, V', are a fast and loose pulley upon
105 the shaft of the drum, to carry a driving belt by which motion is imparted to the machine.

The operation is as follows: A skin of leather being placed upon the bench N, and
110 the latter suitably adjusted in angle and in proximity to the presser, the machine is set

in motion in the direction indicated by arrows. On passing over the roller E, the knife frame is received between the guides k , k' , of the presser which hold the knife
 5 firmly to its work and prevent its displacement while the shaving, or "whitening", of the leather is performed. At the same time the cam flange k^2 , imparts an endwise motion to the knife as previously explained
 10 thereby effecting an easy and smooth cut. During this operation a foot is applied to the treadle M, with as much pressure as may be needful. A skillful operator can by this means readily detect by feeling, any im-
 15 perfection or irregularity in the cutting of the knife and can stop the cutting instantly by withdrawing his foot. The use of the presser enables the knife attachments to be made much lighter and insures accuracy of
 20 work. On reaching the clearer T, the forward end of the knife engages therewith and as the knife progresses, the clearer is carried backward and passes from end to end of the knife entirely clearing it of the shavings of
 25 leather which have collected beneath the edge.

A knife with a turned edge such as is represented in Fig. 2, is necessary in a machine

of this kind, and the form of clearer described is almost the only one which can be
 30 successfully employed in connection with such a knife.

What I claim as new and of my invention herein and desire to secure by Letters
 Patent; is, 35

1. The combination of the treadle M, levers L, and presser K, the latter being constructed with guides k , k' , and employed in connection with a knife or scraper frame I, attached to an endless belt G, in the man-
 40 ner and for the purposes set forth.

2. The pivoted spring clearer S s, T, constructed substantially as herein shown and described and employed to clean the knife during its continuous motion as explained. 45

3. The combination of the pivoted knee n , wedge R, and slide O, for adjusting the bench N, as explained.

The above specification of my improvements in machines for dressing leather
 50 signed this twenty third day of February 1861.

CHARLES KORN.

Witnesses:

OCTAVIUS KNIGHT,
 L. W. BENDRÉ.