A. SEYMOUR-JONES.

SHAVING MACHINE.

APPLICATION FILED APR. 15, 1908.

**900,002.** Patented Sept. 29, 1908.

*Fig. 1.*

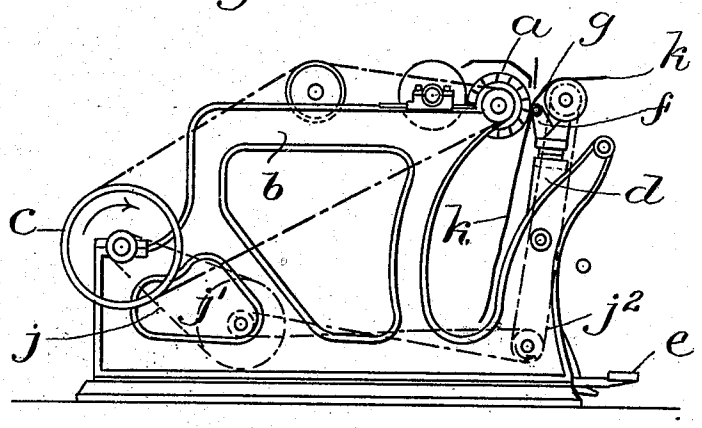
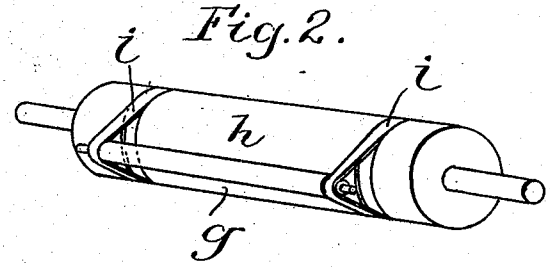



*Fig. 2.*




*Witnesses:*
A. L. Folsom.
F. R. Ralstone

*Inventor.*
Alfred Seymour-Jones
by Wright Brown Quinby & May
attys.

THE NORRIS PETERS CO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

ALFRED SEYMOUR-JONES, OF PENDOWER, WREXHAM, ENGLAND, ASSIGNOR TO THE TURNER TANNING MACHINERY COMPANY, OF PEABODY, MASSACHUSETTS, A CORPORATION OF MAINE.

## SHAVING-MACHINE.

No. 900,002. Specification of Letters Patent. Patented Sept. 29, 1908.

Application filed April 15, 1908. Serial No. 427,120.

*To all whom it may concern:*

Be it known that I, ALFRED SEYMOUR-JONES, of Cambrian Leather Works, Pendower, Wrexham, England, have invented certain new and useful Improvements in Shaving-Machines, of which the following is a specification.

This invention for improvements in shaving machines for leather and the like has for its object to provide a machine whereby a clear cut may be obtained without heating or burning the tanned skins.

Hitherto in machines of the class having a spiral knifed roller on to which the skin to be shaved is fed or pressed by means of a rubber roller of from ten to twelve inches in diameter, it has been found in practice that owing to the large surface of skin presented by the rubber roller and acted on by the revolving knife the skins get heated or burned in the operation.

This invention consists in providing a bed roll of comparatively small diameter and preferably shorter in length than those at present in use in conjunction with a feeding roller or other support for the skin which is of considerably larger diameter, and which support has an open space above it to permit the skin to be controlled by the hands of the attendant while it is being fed between the bed roll and knife roll.

In carrying this invention into practical effect the spiral knifed roller which is preferably about 10 inches in diameter is mounted in the frame of the machine in the usual manner and driven by a belt pulley and a brass bed roller of about 1 inch diameter and of from 5 to 12 inches long is mounted in front of the knife in a swinging frame operated by a foot pedal. The skin is fed between the metal bed roller and the knife by means of a wooden roller of larger diameter which is also carried in the swinging frame and which roller drives the metal roller by means of small belts which run in two grooves in the wooden roller and on the ends of the metal roller. The belts also act as conveyers for the skin which is fed into the machine by hand.

Any suitable material may be used in the construction of the rollers.

In the accompanying sheet of illustrative drawings Figure 1 is a side elevation of a shaving machine constructed according to this invention, and Fig. 2 is a perspective view of the bed roller and the auxiliary or feeding roller.

The knife roll or cylinder *a* is mounted to revolve in the frame *b* of the machine in the usual manner, and driven by the belt pulley *c*. In front of the roller *a* is a swinging frame *d* connected with the usual pedal *e*. Near the upper end of the frame *d* are brackets *f* in which the thin bed roll *g* is journaled, opposite the knife roll *a*, the feed roller *h* being also carried by the swing frame *d*. Roller *h* is grooved as shown and connected with the bed roller *g* by belts *i* so that the bed roll *g* is driven by the roller *h* which is in turn driven by the pulley *c* through the belting *j j'*, *j*$^2$.

In operation the skin *k* is fed to the machine over the roller *h* and belts *i* which act as conveyers for the skin and passes downwards between the thin bed roller *g* and knife roller *a*. As the space above the support afforded by the roller *h* and belts *i* is free and open, the attendant can, with entire safety, control the skin by his hands as it is fed so that it will be held back to the speed of movement of the surface of the support and not be drawn through by the faster-traveling knife roll.

With the arrangement described it will be seen that while a narrow surface of skin is presented to the knife, the necessary surface for the adhesion of the skin is provided by the auxiliary roller and belts *i*. The knives therefore can deeply enter the surface of the skin and remove a heavy layer at a time. The power required is very small, the friction being greatly reduced there is no injurious heating of the skin. It is therefore possible to shave the same place as often as required without fear of the skin getting hard and brittle through the repeated heating. Furthermore, this invention allows the skin to be shaved in its whole length by a single cut and at one operation. The small diameter of the bed roll and the arrangement of belts *i* prevent the wet skin from sticking to the bed roll and being wound round it. For the same reason skins can be shaved much wetter than before and finally danger to the operator is altogether avoided.

Although described as applicable to shaving machines, it will be readily understood that the invention is equally applicable to machines performing similar operations such as whitening, buffing and fluffing machines.

Having thus explained the nature of my said invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, I declare that what I claim is:—

1. In shaving or similar machines for leather and the like, the combination with a knife roll and a movable support for the material, of a bed roll having a small diameter in comparison with the knife roll, said bed roll being located between the support and knife roll, the space above the support and bed roll being open to permit hand-control of the material, means for rotating the knife roll in a direction to draw the material over the bed roll and means for actuating said support to cause its surface to travel in a direction to feed the material, under hand-control, between the bed roll and knife roll.

2. In shaving or similar machines for leather and the like, the combination with a knife roll, of a swinging frame having a bed roll and a support comprising a large-diameter roller and belts connecting it with the bed roll, the bed roll having a small diameter in comparison with the knife roll and located between the support roller and the knife roll, the space above the support and bed roll being open to permit hand-control of the material, means for rotating the knife roll in a direction to draw the material over the bed roll and means for actuating said support to cause its surface to travel in a direction to feed the material, under hand-control between the bed roll and knife roll.

In testimony whereof I have affixed my signature, in presence of two witnesses.

ALFRED SEYMOUR-JONES.

Witnesses:

W. J. SULIS,

WM. PIERCE.