

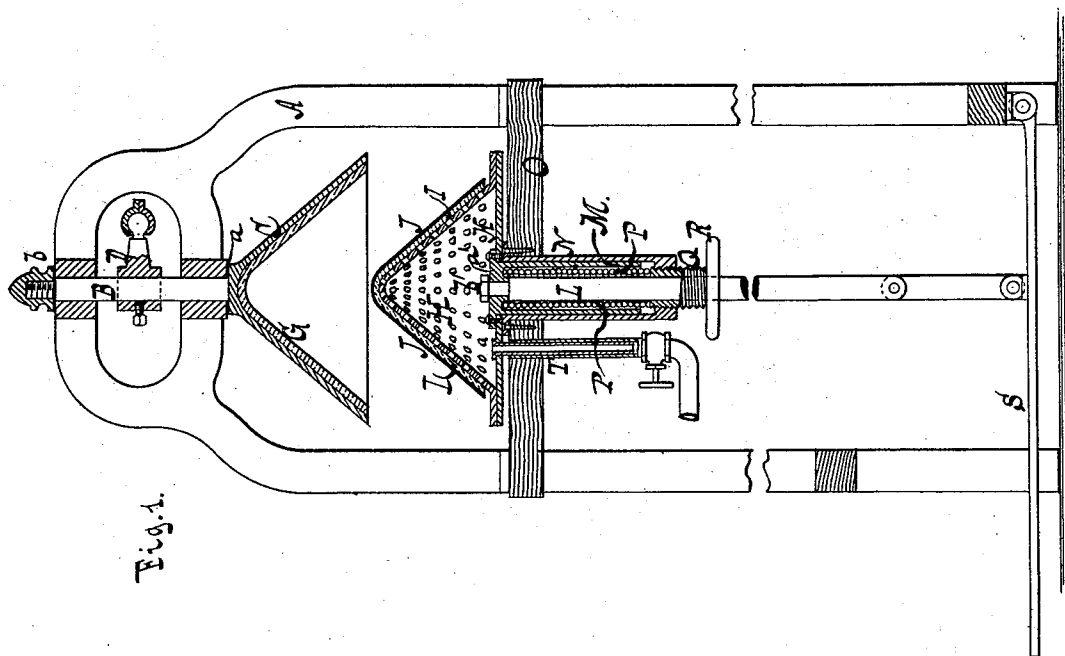
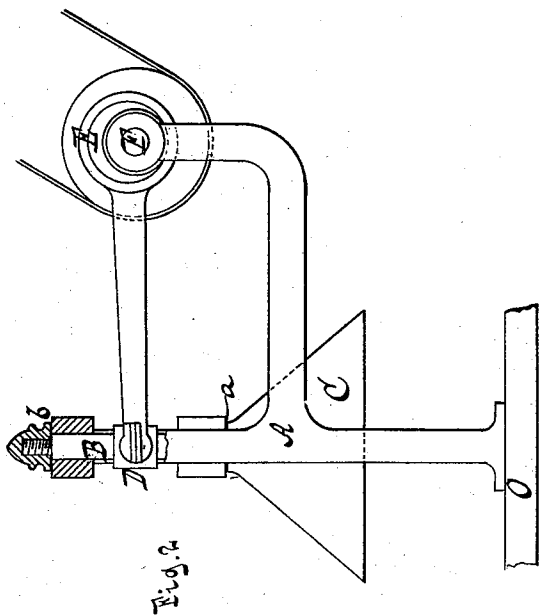
(No Model.)

W. A. BAGLIN.

MACHINE FOR UNITING NAP BATS TO HAT BODIES.

No. 508,462.

Patented Nov. 14, 1893.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM A. BAGLIN, OF BROOKLYN, NEW YORK, ASSIGNOR TO GEORGE YULE, OF NEWARK, NEW JERSEY, AND TWEEDY & COMPANY, OF NEW YORK, N. Y.

MACHINE FOR UNITING NAP-BATS TO HAT-BODIES.

SPECIFICATION forming part of Letters Patent No. 508,462, dated November 14, 1893.

Application filed February 21, 1882. Serial No. 53,307. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. BAGLIN, a subject of the Queen of Great Britain, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Machines for Unit-
ing Nap-Bats to Hat-Bodies, of which the fol-
lowing is a specification.

This invention consists partly in a method
of sticking fur to a previously felted hat body
by applying a layer of fur to the felted hat
body, and then subjecting the material to the
combined pressing and rubbing action of a
vibrating jigger.

It also consists in a means for applying the
friction of a vibrating jigger to the hat body
and fur bat in a conical form.

The apparatus consists in a cone and bell
adapted to hold the hat body between them,
and means for pressing the cone and bell one
upon the other and vibrating one of them in
relation to the other.

In the accompanying drawings, Figure 1 is
a front view of an apparatus adapted to prac-
tice my invention, the parts being in section
at the center line where hatched. Fig. 2 is a
side elevation of the means for vibrating the
bell, the parts at the upper end of the view
being in section at the center line where
hatched.

Similar letters indicate corresponding parts.

In the example shown in the drawings, the
letter A designates a frame which is by pref-
erence made of cast iron. In the upper part
of the frame is mounted a vertical shaft B to
the bottom end of which is secured the bell
C. The shaft is adapted to oscillate, but is
prevented from moving in the direction of
its length by a shoulder *a* and nut *h* fitted to
the frame A. An eccentric E (see Fig. 2)
is mounted upon a horizontal shaft F sup-
ported upon the frame and rotated by suit-
able means, and the eccentric is connected
with an arm D attached to the shaft B so
that the rotation of the eccentric produces in
the shaft and bell C an oscillating or a recip-
rocating revolving motion. Any other suit-
able mechanism may be used in place of the
arm D and eccentric E for imparting to the
shaft and bell such oscillating movement.

The bell C is provided with a lining G of

india-rubber or other equivalent material,
such as leather. A perforated cone H is
shown below the bell C to support the bat I
and the hat body J which are to be united.
The cone is secured to a platform or carrier
K which is attached to the upper end of a
vertical and movable spindle L. A tube M
is fitted over the spindle L and extended
through the carrier K. The tube is formed
at the top with a plate *a'* and with a flange
overlapping the carrier. The plate *a'* is fas-
tened to the spindle L by a bolt *b'*, and its
flange is attached to the carrier K by screws
c. The tube M is guided by a sleeve N which
is secured to the under side of a table O at-
tached to the frame A. A threaded sleeve Q
is fitted into the bottom end of the guide N,
and provided with a hand-wheel R, and a spi-
ral spring P is fitted between the under side
of the plate *a'*, and the upper end of the sleeve
Q, so that the turning of the sleeve by its
wheel R operates to alter the tension of the
spring as may be desired. The spring oper-
ates normally to press the tube M and the
spindle L upward, thus forcing the cone H
into the bell C. A treadle or foot lever S is
pivoted to the lower part of the frame A, and
is linked to the spindle L. The pressure upon
the treadle draws the spindle down in oppo-
sition to the spring P, as shown in Fig. 1.
When in such position, the bat and hat body
may be placed upon the cone H, and the re-
moval of the foot from the treadle then per-
mits the spring P to press the cone upward
within the bell. The bell then bears upon
the outer surface of the hat body, and when
oscillated by the eccentric E the friction pro-
duced by the yielding lining G causes the
hairs or the fur bat to engage with the felted
body so as to unite the bat firmly thereto.
The carrier or platform K, being sustained
upon the spring P, is pressed elastically with-
in the bell, and the body and nap bat are thus
acted upon very gently and with great uni-
formity throughout, and without the liability
of tearing, injuring or dislocating any portion
of the bat.

The cone is shown in Fig. 1 provided with
perforations, and a telescopic tube T con-
nected with a pipe and cock is inserted through
the carrier K so that hot air or steam may

be supplied to the interior of the bat during the "sticking" of the bat to the body. Heat alone, and especially heat and moisture, operate to soften the hat body so that the fur of the bat can readily unite therewith; the friction produced by the oscillation of the bell operating at the same time to rub the fibers back and forth upon one another, as is required in the sticking operation.

Prior to my invention, I am not aware that the sticking of bats to previously felted hat bodies has ever been effected by mechanism, and I have therefore claimed the use of a vibrating jigger, irrespective of heat and moisture, to produce the combined pressing and rubbing action required. I have also claimed the method of sticking by a vibrating jigger, and steam. The sticking operation is effected by pressing the bell and cone upon the hat body and the fur bat and oscillating one of them in relation to the other and it is obviously immaterial which one is pressed upon the other, or oscillated to rub the fibers of the fur and hat body together.

What I claim herein is—

1. The herein described method of sticking fur to a previously felted hat body, which consists in applying a layer of fur to the felted hat body and then subjecting the material to a combined pressing and vibrating jigger action, substantially as described.

2. The herein described method of sticking fur to a previously felted hat body, which consists in applying a layer of fur to the felted hat body and then subjecting the material to a combined pressing and vibrating jiggling action with heat, substantially as described.

3. The herein described method of sticking

fur to a previously felted conical hat body, which consists in applying a layer of fur to the felted hat body and then subjecting the material while in a conical form to a combined pressing and vibrating jiggling action with dry heat, substantially as described.

4. The combination, with the bell having a lining of rubber or equivalent material, of a cone adapted to fit the bat and hat body, mechanism for pressing the bell and cone upon one another, and mechanism for oscillating the bell and cone in relation to one another, as set forth.

5. The combination, substantially as hereinbefore described, of the cone fitted to the bat and the hat body, the bell having a lining of rubber or equivalent material, mechanism for pressing the bell and cone upon one another, and mechanism for oscillating the bell and cone in relation to one another, as set forth.

6. The combination, substantially as hereinbefore described, of the perforated cone fitted to the bat and the hat body, the bell having a lining of rubber or equivalent material, means for pressing the cone and bell upon one another, means for applying the heat and moisture of steam to the nap bat and hat body when pressed between the cone and bell, and means for oscillating the bell and cone in relation to one another, as set forth.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

WILLIAM A. BAGLIN. [L. S.]

Witnesses:

J. VAN SANTVOORD,

E. F. KASTENHUBER.