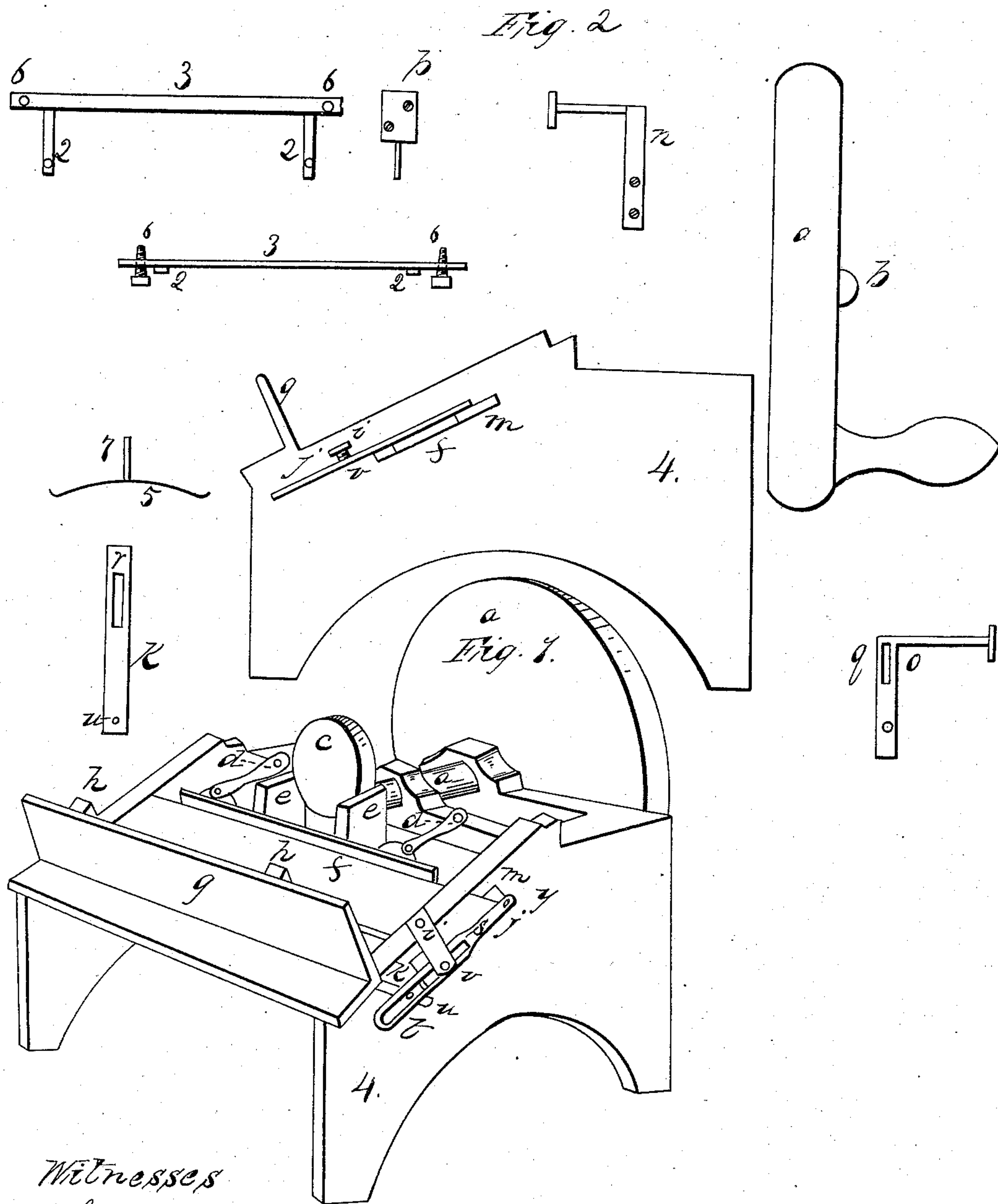


A. Gummer,
Making Laths.
N^o 32,103. Patented Apr. 16, 1861.



Witnesses
J W Copeland
J F Bout

Inventor.
Albert Gummer

UNITED STATES PATENT OFFICE.

ALBERT GUMMER, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO HIMSELF AND GUSTAVAS ZSCHECK, OF SAME PLACE.

LATH-MACHINE.

Specification of Letters Patent No. 32,103, dated April 16, 1861.

To all whom it may concern:

Be it known that I, ALBERT GUMMER, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Lath-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view and Fig. 2 an end view.

The nature of my invention consists in the use of two distinct and separate rests for sustaining the bolt while it is being cut into laths, from those found in other machines, inasmuch that in one case, by the peculiar construction of the rests, a recess is formed, so as to admit of the falling of the lath without obstruction, and in another by an arrangement of causing the two rests to recede from each other in a horizontal direction; also a provision for throwing out the lath.

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

I construct my machine with a rectangular frame as shown at Figs. 1 and 2, and also especially designated by the Figs. (4, 4.)

(*a, a*) is the fly wheel fastened on one end of the shaft (*b, b*), and the cam (*c*) is fastened on the opposite end of the shaft (*b, b*), and working between the jaws (*e, e*), which form a part of the knife plate (*f, f*), which slides to and fro in the slot (*m, m*).

(*g, g*), is the cross piece against which and between the two guides (*h, h*) the bolt to be cut into laths is placed.

(*q*), and (*n*), are rests or supporters of the bolt. They are formed in the shape of a right-angle and crossed at the outer points by another piece riveted on the top. The object of these pieces is to prevent the friction that would otherwise occur between the bolt and the rests, (*f, f*), but the object of the right angled rest is to create a recess or space long enough to let the lath fall inside of the rests (*q* and *n*), after it is cut from the bolt. This peculiar form of the two rests (*q*) and (*n*) is particularly essential when both of them are permanently bolted to the knife plate (*f, f*), as they are sup-

posed to be at pleasure. But at present only one is fastened so.

(*o*), is a slot formed in the rest (*q*).

(*p*), is a pin to work in the slot (*o*),

holding it stationary when the knife-plate (*f, f*) is driven forward by the working of the rest (*q*) on a joint and relieving it from contact with the bolt at the same time, and thus when the rest (*p*) is firmly attached to the knife plate (*f, f*), it moves directly with the knife plate and entirely out of the way of the falling lath, while the other rest (*q*) is held stationary or comparatively so at the same time, thus giving all the space possible for the lath to fall through without impediment, and by the returning of the knife plate (*f, f*), the two rests (*q*) and (*n*) are brought directly under the bolt again.

(*k, k*), is a lever rest sliding lengthwise of the frame and in the end of which is the pin (*u*) which works in the slot (*t*), of the lever (*j*) this lever being attached to the knife plate (*f, f*) at its end (which moves in a diagonal direction by turning the fly wheel,) and carries with it one end of the lever (*j*), while the other end is thrown in an opposite direction by means of the fulcrum pin (*v*), which is fastened in the projecting piece (*i*), and each one of the two pins (*v*), and (*u*) plays loosely up and down a separate slot for each pin, to accommodate the reciprocating and diagonal motion of the knife plate (*f, f*). Thus it will be seen by this arrangement we are enabled to withdraw the rest (*k k*) clearly out of the way of the lath, and relieving it from every impediment at the time of its being thrown out.

(3, 3), is a jaw placed under the front edge of the knife which is bolted to the knife plate (*f, f*), the object of this jaw is to accommodate the spring (5) by forming a sort of shelf for the lath when it is being cut to slide upon and to keep the edge of it square against the spring (5) which is intended to force out the lath after it is cut from the bolt, and to destroy the tenacity of the fiber in holding on to something even after it is cut from the bolt. This spring is set between the jaw (3 3) and the under part of the knife and is made fast in the front edge of the knife plate (*f f*) and at the time of commencing to cut the lath the spring being of a circular form begins to assume a straight position, until the lath is

cut when it rebounds, and in so doing throws
off the lathe. But with reference again to
the jaw (3 3,) there is yet another function
to be spoken of which it performs, it may be
5 used with or without the circular spring,
(5,) in using it without the spring (5) it
is simply necessary to extend the two pro-
jecting pieces (2, 2, 2, 2,) as wide apart
from each other as possible, then in that
10 case the two set-screws (6, 6, 6, 6,) are
slackened, and the jaw (3, 3,) is closed so
as to pinch the lath and is held by the jaw
(3, 3,) until the next lath is cut, which
presses the former one up and it falls
15 through between the projecting pieces
(2, 2, 2, 2,) to the floor, and so on with all
the others after it. So the difference in the
two ways of shedding the lath from the bolt
is first by means of the spring (5) throwing
20 it forward, and the other is by means of

the lath being forced by the cutting of it
between the jaw and the edge of the knife
when it is pressed up by the succeeding lath
and finally falls to the floor in an opposite
direction from that thrown out by the 25
spring (5.)

What I claim and desire to secure by Let-
ters Patent is—

1. The operation of the right-angled rest
(*q*,) with the slot (*o*,) and the pin (*p*,) or 30
their equivalents, as described.

2. The jaw (3, 3,) with the projecting
pieces (2, 2, 2, 2,) the two set-screws
(6, 6, 6, 6,) and the circular spring (5,) 35
substantially as and for the purpose set
forth.

ALBERT GUMMER.

Witnesses:

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Z. F. TOUT.