

(No Model.)

H. A. STONE.  
MACHINE FOR PRODUCING METAL LATHING.

No. 459,727.

Patented Sept. 15, 1891.

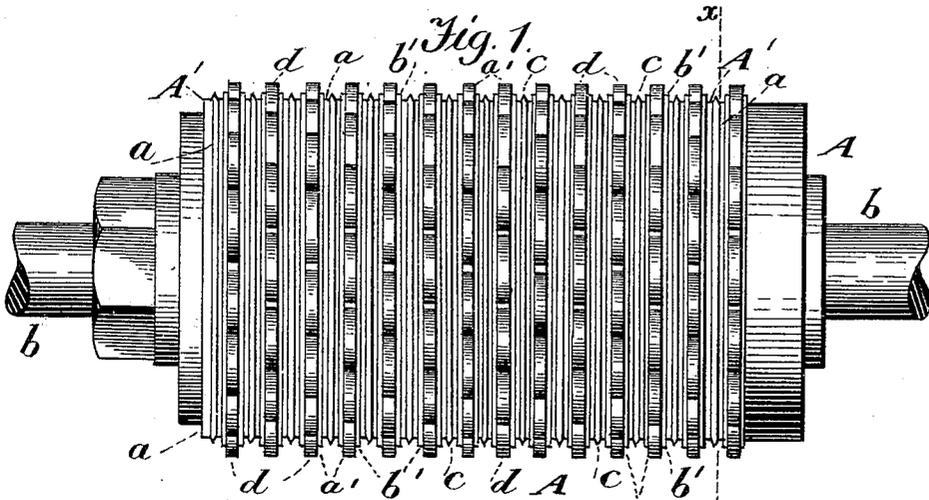


Fig. 2.

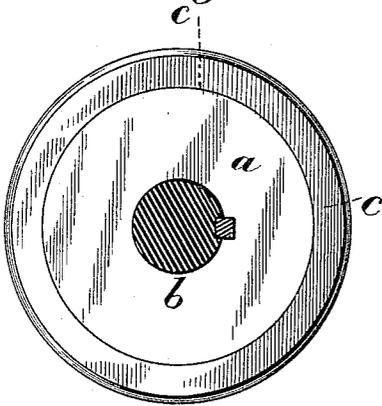


Fig. 3.

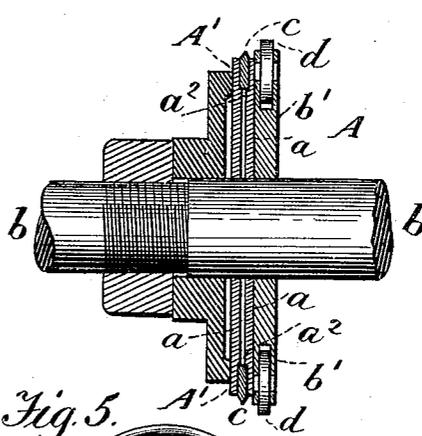


Fig. 4.

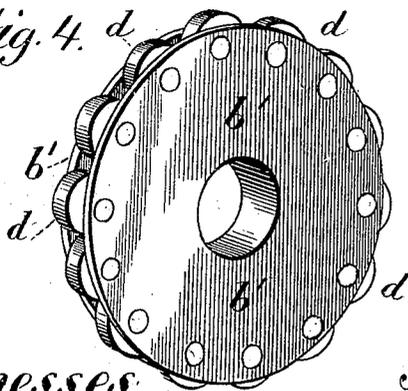


Fig. 5.

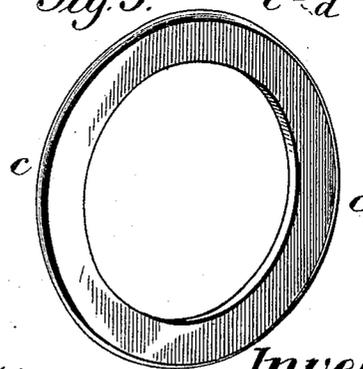
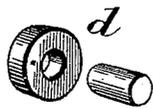


Fig. 6.



Witnesses:  
A. Ruppert  
E. Case.

Inventor:  
Harley Alpheus Stone,  
by *[Signature]*  
Att'y.

# UNITED STATES PATENT OFFICE.

HARLEY ALPHEUS STONE, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE BOSTWICK METAL LATH COMPANY, OF NEW YORK.

## MACHINE FOR PRODUCING METAL LATHING.

SPECIFICATION forming part of Letters Patent No. 459,727, dated September 15, 1891.

Application filed April 28, 1891. Serial No. 390,810. (No model.)

*To all whom it may concern:*

Be it known that I, HARLEY ALPHEUS STONE, of the city, county, and State of New York, have invented certain new and useful Improvements in Machines for Producing Metal Lathing, of which the following is a specification, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates, generally, to that class of machines in which rotary male and female dies are employed, through or between which the sheet metal to be operated upon is passed, and more especially to a machine by means of which in such passage the sheet is slitted and given a series of loops projecting from one side of the sheet and corrugated or ribbed; and it consists in constructions and combinations of parts by means of which the operation of the machine is improved and the structure made more durable and less liable to become unfit to do good work, and whereby, further, certain of its operative parts, when worn, may be readily removed for the substitution of new parts, all as hereinafter specified.

In the accompanying drawings, Figure 1 is a front elevation of one of a pair of rolls constituting my invention. Fig. 2 is a vertical transverse section through the line  $xx$  of Fig. 1. Figs. 3, 4, 5, and 6 are details, as hereinafter described.

Similar letters of reference indicate similar parts in the respective figures.

The roll containing the male dies is represented by A, the other roll, or that having the female dies, not being shown. The roll A comprises a series of disks A', each consisting of two plates  $a$ , of wrought iron, centrally bored to fit the mandrel  $b$ , each plate being faced off, as at  $a^2$ , to form a recess for the reception of a ribber  $c$ , of hardened and tempered steel, which is clamped between the plates. The disks A' are placed so as to leave a space  $a'$  between each adjacent pair, this space being occupied by a series of small circular cutters  $d$ , mounted on detachable pins in a circumferentially-grooved plate  $b'$ , as shown in Figs. 3 and 4. The cutters  $d$  are made of steel properly hardened and tempered, it being of great importance that they shall be durable and capable of maintaining

sharpened edges. It is also of great importance that the ribber  $c$  shall not be readily subject to wear and shall possess great durability, heretofore much difficulty having been found in constructing a disk the ribber of which has possessed the qualities named. By constructing the disk A' in the manner described—that is to say, of two plates  $a$ , with the ribber  $c$  of hardened steel clamped between them—I have found that excellent results are obtained, the ribber being readily hardened, which cannot be accomplished when it is integral with the whole body of the disk. The roll with which that A works is preferably constructed in the manner described in my application Serial No. 390,809, to which reference is made.

Heretofore cutters used in machines of this class have been liable to become dull or distorted, and a principal object of my present invention is to provide a cutter by the use of which such disadvantages may be avoided and which may be kept in stock and easily replaced when worn or broken or readily removed for grinding or sharpening. This advantage and that derived from making the disks A' of two sheets of wrought iron and the ribber of hardened steel clamped between them, so that the ribber may be given the proper hardness and temper, give greatly-increased value to a machine in which the constructions here described are embodied.

Having described my invention, I claim—

1. In a roll for machines for making metal lath, a series of disks, each consisting of a pair of metal plates, and a ribber clamped between them, combined with cutters arranged in spaces between the disks near the circumferences thereof, substantially as set forth.

2. In a roll for machines for making metal lath, the combination of a series of disks, each consisting of a pair of plates, and a ribber clamped between them and a series of circumferentially-grooved plates having cutters mounted therein near their circumferences, substantially as set forth.

In testimony whereof I hereto set my hand and seal.

HARLEY ALPHEUS STONE. [L. s.]

Witnesses:

E. J. GRANGER,  
W. J. MORGAN.