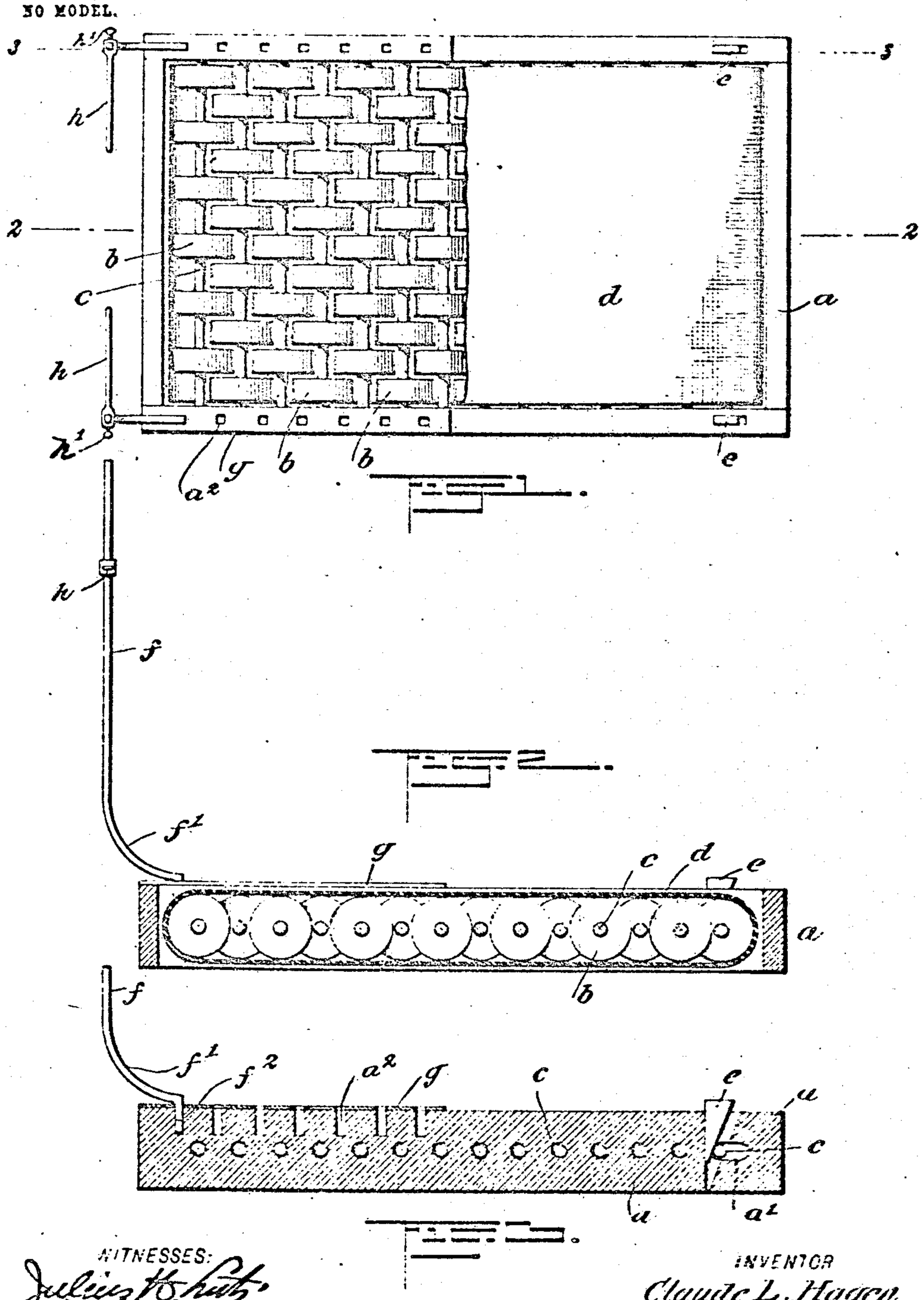
No. 767,221. PATENTED AUG. 9, 1904.

C. L. HAGEN.

TRAINING MACHINE.

APPLICATION FILED JULY 19, 1902.

NO MODEL.



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No. 767,221. Patented August 9, 1904.

UNITED STATES PATENT OFFICE.

CLAUDE LAURAINE HAGEN, OF NEW YORK, N. Y.

TRAINING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 767,221, dated August 9, 1904.

Application filed July 19, 1902. Serial No. 116,235. (No model.)

To all whom it may concern:

Be it known that I, CLAUDE LAURAINE HAGEN, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Training-Machine, of which the following is a full, clear, and exact description.

This invention relates to a machine for facilitating the athletic exercises or training of men and animals.

It is preferably applied as an exercising or training machine for men, in which connection it is here illustrated, although it will be obvious from the following description that it may be used with equal advantage for the training and exhibition of animals.

Its general characteristic is a frame and an endless apron which is held on rollers in the frame, said apron moving under the feet of the person using the machine.

One of the prime features of the invention lies in the peculiar construction of the rollers which support the apron, these rollers being arranged in rows, the members of which are spaced apart and the members of one row being arranged to overlap or fit between the members of the adjacent row, thus providing a comparatively uniform treading-surface, which constitutes a great advantage over prior constructions, in which rollers of continuous or unvarying diameter were laid side by side and had the apron run over them.

The invention involves various other features of construction and arrangement of parts, which will be hereinafter fully set forth.

This specification is an exact description of one example of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the invention with a part of the apron broken away. Fig. 2 is a section on the line 2 2 of Fig. 1, and Fig. 3 is a section on the line 3 3 of Fig. 1.

The form and dimensions of the framing are not essential. I prefer, however, to construct the frame *a* in rectangular form, as illustrated. The rollers *b* are arranged in transverse rows, each row being carried on an axial shaft *c*, which shafts are mounted to turn in the sides of the frame. (See Fig. 3.) The rollers are preferably fastened to or formed integral with the shafts *c*, and these shafts turn in the frame. Said rollers are spaced from each other on their shafts, and the rollers of the second line are arranged between the spaced rollers of the first line with their peripheries closely approaching the shaft *c* of said first line of rollers. The next or third line of rollers is arranged correspondingly with the second line, and so on throughout the machine.

d indicates the endless apron, which may be constructed of any suitable material and which is run over the rollers and within the frame, as shown.

Now it will be observed that owing to the peculiar form and arrangement of the rollers a thoroughly regular and uniform tread is provided for the person using the machine. In machines of this sort heretofore devised the uniform rollers laid side by side left deep cavities between each roller, and the fabric apron bent down into these cavities, greatly interfering with the tread of the person running on the apron. This disadvantage is entirely overcome by my improvements.

One of the end shafts *c*, as best shown in Fig. 3, is mounted in longitudinally-disposed slots *a'* in the frame *a*, so that said shaft may be adjusted transversely of itself to regulate the tension of the apron *d*. To facilitate the adjustment of this shaft, wedges *e* are provided, said wedges working in vertical slots formed in the frame *a*. By this device the tension of the apron may be regulated at will.

When using the apparatus for horses or other quadrupeds, a suitable harness (not shown) will be provided; but when using the machine as a training apparatus for men stanchions *f* are employed, these stanchions having laterally-turned lower portions *f'*, terminating in square extremities *f²*, adapted to engage in sockets *a²*, formed in the side portions of the frame *a*. *g* indicates a wear-plate, of metal, which is placed over said sockets *a²*, as shown, and which serves to prevent

marring the wooden frame and also to reinforce the side walls of the sockets a^2.

Adjustable on each stanchion f is a horizontal handle h. These handles h and their supporting-stanchions may be adjusted into various positions to suit the convenience of the user. The square ends f^2 of the stanchions fitting loosely in the square sockets a^2 permit the stanchions to be turned so that their curved portions f' will project forward, rearward, or to either side. Further, by shifting the stanchions from one socket a^2 to another their position on the frame may also be adjusted. The handles h may be removed from the stanchions and refitted thereto in any adjustment desired, and their elevation on the stanchions may also be regulated by set-screws h' or other fastenings of any form desired. The stanchions f and handles h should be adjusted to suit the convenience of the user, and then the handles h should be grasped, the person running over the apron d, which slides from under his feet, and, although the user does not actually advance, the physical effect is exactly the same as though he were running over a plane surface.

In using the apparatus for exercising animals a suitable harness should be provided, and the animal may be run on the apron very much the same as in the well-known treadmill.

This device is particularly advantageous for steadying a horse or like animal while its gait is being studied or photographed. For example, farriers frequently trot or canter a horse before applying the shoes, so as to determine the position a shoe should take, and this apparatus will be very valuable to such persons, since it may be placed in the shop and does not require any more room than approximately the length of a horse.

Various changes in the form and details of my invention may be resorted to at will without departing from the spirit of my invention. Hence I consider myself entitled to all forms of the invention as may lie within the intent of my claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A training-machine, comprising a plurality of rows of rollers, the members of said rows of rollers being spaced from each other, and the spaced members of one row of rollers fitting between or side-lapping the spaced members of the adjacent row, whereby to form an essentially continuous bed having an irregular upper surface, and an apron mounted to move over said rollers, said apron being flexible in all directions to permit it to sink into the irregularities in the upper surface of said bed, whereby a firm footing is secured for an animal treading on the apron.

2. An exercising device, comprising a frame, treading means held therein, a stanchion having an angular lower portion fitted within a corresponding angular cavity in the frame, and a handle-arm projecting transversely from the stanchion, whereby upon adjusting the stanchion in said cavity, the handle-arm may be projected in different directions to suit the convenience of the user.

3. An exercising device, comprising a frame, treading means held therein, a stanchion having an angular lower portion adjustably fitted in a corresponding cavity in the frame, the stanchion also having a lateral bend therein, and a handle-arm projecting transversely from the stanchion above the lateral bend thereof.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLAUDE LAURAINE HAGEN.

Witnesses:

ISAAC B. OWENS,

JNO. M. RITTER.