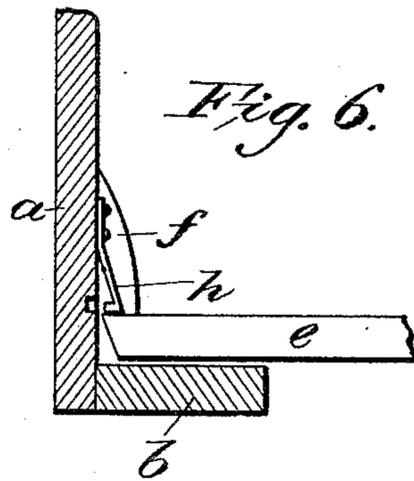
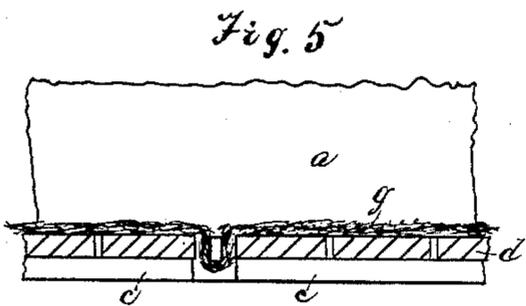
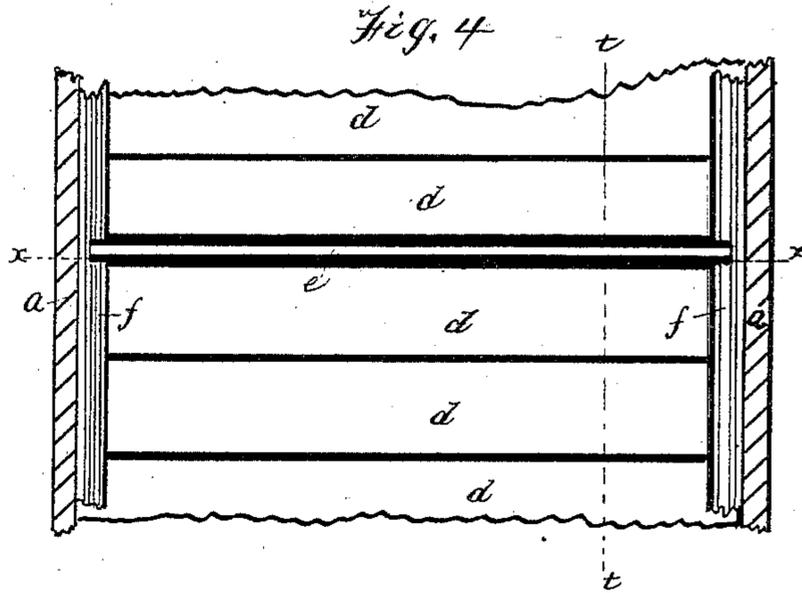
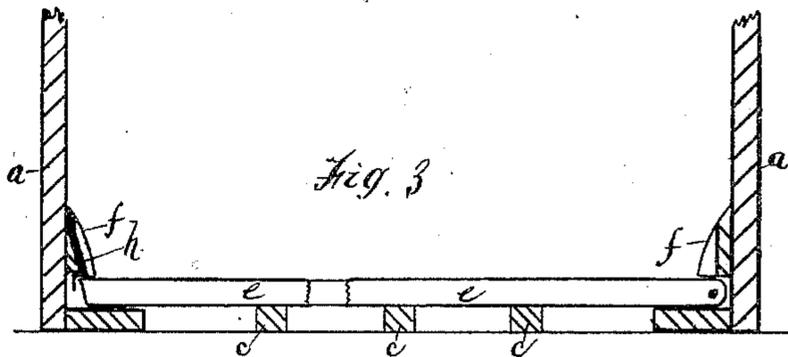
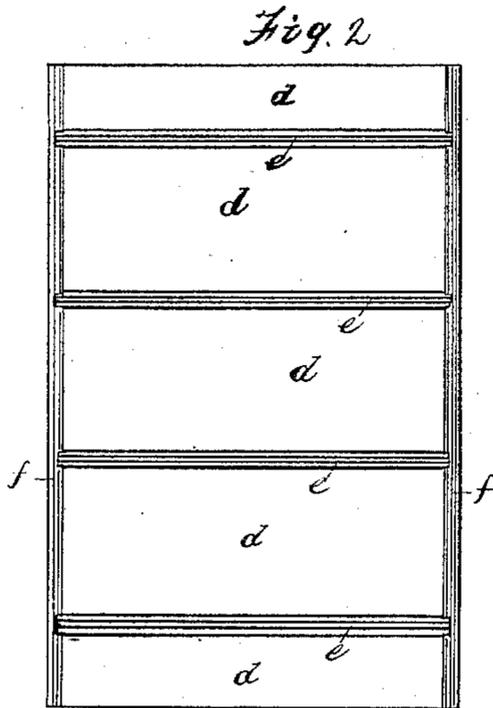
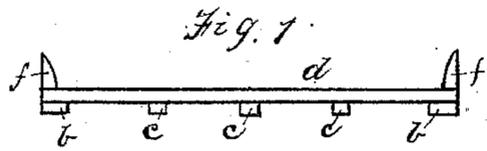


(No Model.)

A. GOODYEAR.  
STALL FLOOR.

No. 436,778.

Patented Sept. 23, 1890.



Witnesses

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# UNITED STATES PATENT OFFICE.

AUSTIN GOODYEAR, OF HOLYOKE, MASSACHUSETTS.

## STALL-FLOOR.

SPECIFICATION forming part of Letters Patent No. 436,778, dated September 23, 1890.

Application filed April 4, 1890. Serial No. 346,588. (No model.)

*To all whom it may concern:*

Be it known that I, AUSTIN GOODYEAR, a citizen of the United States of America, residing in Holyoke, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Animal-Beds, of which the following is a specification, reference being had to the accompanying drawings, and letters of reference marked thereon, in which drawings like letters of reference indicate like parts.

Figure 1 is an end view of my improved device. Fig. 2 is a plan or top view of the same. Fig. 3 is an end view in section on an enlarged scale. Fig. 4 is a top view of a section on an enlarged scale. Fig. 5 is a side view in section showing the bedding in place; and Fig. 6 is a view, on an enlarged scale, illustrating the arrangement of the spring for securing the binder in place.

Referring to the drawings in detail, *a* indicates the side walls of an ordinary stall for horses; *b*, the lower side rails of the bed; *c*, intermediate supports; *d*, planking; *e*, binding-levers; *f*, top rail, and *g* bedding.

In the construction of the device I provide two bottom side rails or supports *b*, which extend the whole length of the bed. Upon these rails I secure the planking *d*, the length of the plank being about equal to the width of the bed. The arrangement of the planking on the bottom rails is such that several openings, as hereinafter more fully described, are left between the edges of some of the planks to form slots or openings for the binder *e*; or the planking may be laid on close, and slots or openings afterward cut for the binder. Preference is, however, given to allowing a slight opening between the edges of adjacent plank, excepting where the binder operates, and in such places the openings should be sufficiently wide to permit the binder to enter together with the bedding, which is carried down with the binding. The narrow openings serve as a convenient escape for all water.

Between the main side supports *b*, I attach narrow intermediate supports *c*, these being secured to the lower face of the planking and do not cross the binder-opening, but extend between the binder-openings and from the openings nearest the ends to the ends of the bed.

At each side of the bed, on top of the planking, I attach the top side rails *f*, which preferably extend from end to end of the bed and which are beveled or rounded on their inner face.

I prefer to use four binders in a bed for an ordinary horse-stall, and I pivot them at one end in the binder-openings. The particular manner of pivoting is immaterial. One simple method, however, is to carry a pivot through the end of the binder, letting the ends of the pivot enter openings made to receive them in the edges of the plank at each side of the binder, and to render a removal of the end more convenient in the event of breakage a recess may be cut in the plank from the upper surface to the pivotal point and the pivot rest therein, being fastened in place by a staple, or a chain or link may be attached to the end to prevent its escape.

If the top side rails are too wide to permit the binders to turn on their pivots and swing clear of these rails when the binders are in a perpendicular position, then slots or openings may be cut in these rails to permit free action of the binders.

I prefer that the pivotal point of the binders be such that when the binders are being forced down the pivotal end will bear against the under surface of the top side rails *f* and take the strain, thus relieving the pivot of the severe strain to which it might otherwise be subjected.

To the top side rail opposite to the side on which the binders are pivoted, and just above the opening, I provide a spring *h*, which, when released springs toward the pivotal point of the binder, and which is arranged with an inclined face, so that the free end of the binder will, when it comes in contact with the spring, force it away from its path until the binder is in position with its upper edge flush, or nearly so, with the upper surface of the planking, when the end of the binder passes the spring-shoulder and the spring returns to its first position, overhanging the end of the binder and preventing its escape until the spring be again contracted or forced backward. It will therefore be seen that after placing the bedding in position and spreading it evenly upon the upper surface of the bed it simply becomes necessary to bear the

free end of the binder downward with the foot until it is in the desired position, when it becomes automatically locked in position, and that to release the end it is simply necessary to force the spring backward with a light blow or kick or a thrust with a fork, when the binder will spring upward sufficiently to be grasped and turned to a perpendicular position against the side of the stall, where it may be held with a leather loop or with a spring or any other simple contrivance until the bed is ready to again have the binders placed in position, as before described.

The binders preferably consist of narrow strips of hard wood of a width equal to the thickness of the planking and a thickness sufficient to bear the strain to which they may be subjected. If desired, the binders may be wholly of iron or may be of wood strengthened with iron or steel rods or bars, and the ends of the wood binders may also be strengthened with metal caps or plates. It will be seen, also, that the bottom side rails *b* may be light and the strain taken by the upper side rails, and in this event the bottom side rails will operate, if they be not continuous, as shown.

I find that in use after the animal has stood upon the bed for a short time the straw or other bedding becomes packed together and overloops the top of the binder, so as to present the appearance of a complete and continuous sheet of matting; and I find also that in the employment of my device the bedding is maintained in its original evenly-distributed position, and that while providing a very superior and comfortable bed for the animal that the bedding lasts very much longer than when used in the old and common manner; and it will be seen that the stall may be kept neat and clean very much easier, as the raised position of the bedding permits all water to flow away beneath the planking, leaving the bedding dry, and that a current of air can circulate through the bedding at all times,

while the manure can be easily swept from the mat without waste of bedding, and that the end of the bed may be easily raised to facilitate the convenient cleaning of the stall beneath the bed, or that the whole bed may be readily removed from the stall, if desired.

Having therefore described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the supplemental planking *d*, having binder-openings, with a binder *e*, pivoted at one side of the bed and adapted to enter said openings, and a means to fasten the free end in place, substantially as shown.

2. An animal-bed consisting of the combination of the following elements: the side bottom rails *b*, with planking *d* secured thereto, said planking being provided with binder-openings extending across the bed, (from side to side,) the top rails *f*, secured to the planking, and a binder *e*, pivoted in the binder-openings at one end, and means to secure the free end in position, substantially as shown.

3. The combination of side rails *b*, with planking *d* secured thereon, and intermediate supports *c*, secured to the planking between the binder-openings, and binders *e*, arranged to rest within the binder-openings, as shown, substantially as and for the purposes stated.

4. In an animal-bed, a flooring provided with binder-openings, in combination with binders pivoted at one end, and a spring *h*, arranged at the opposite end of the binder-openings to hold the free end of the binder in place, substantially as shown.

5. The combination of planking *d*, having binder-openings, bottom side rails *b*, intermediate supports *c*, side top rails *f*, binder *e*, and spring *h*, substantially as and for the purposes shown.

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