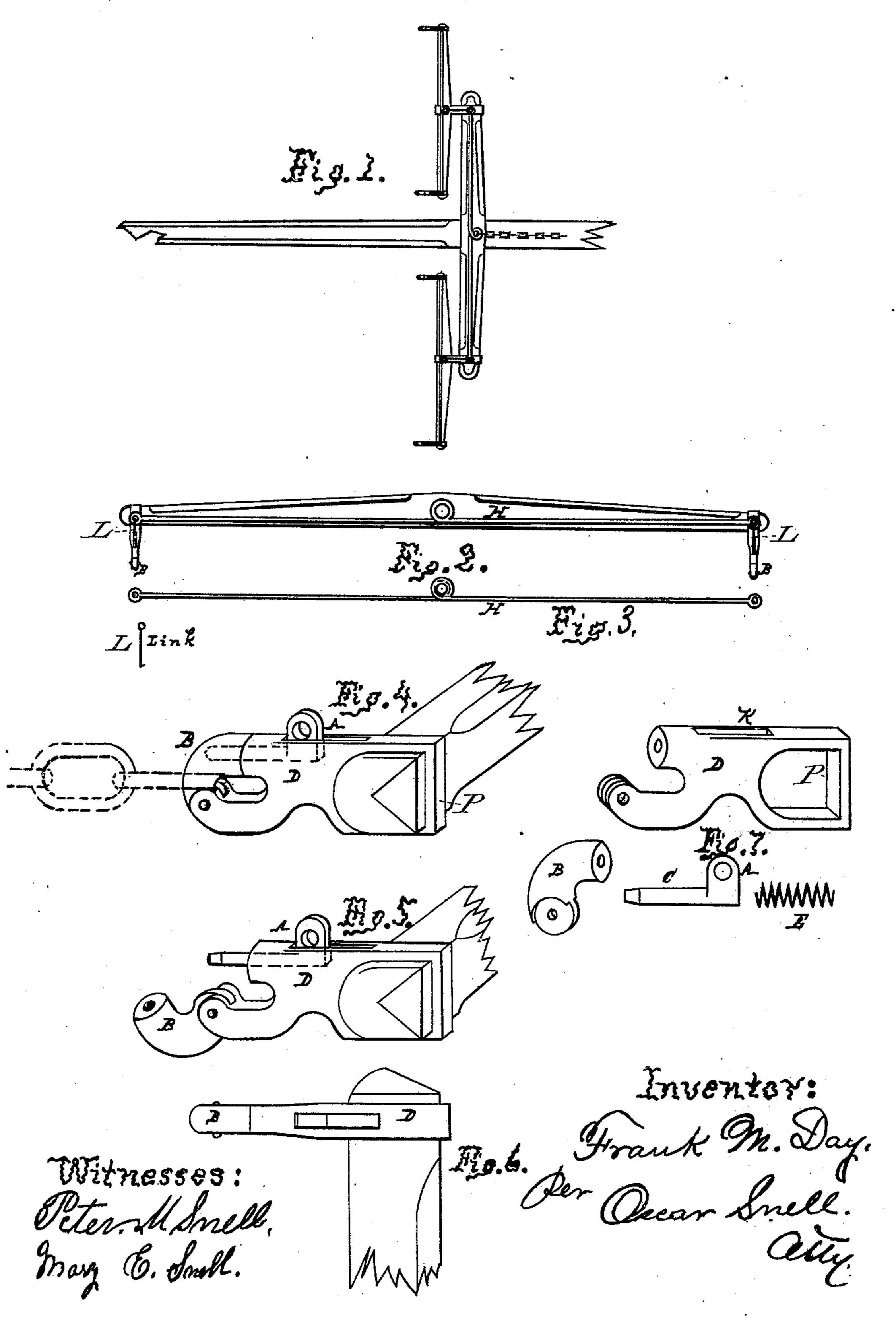
F. M. DAY. Horse-Detacher.

No. 215,211.

Patented May 13, 1879.



## UNITED STATES PATENT OFFICE.

FRANK M. DAY, OF NEW HARMONY, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES G. DAY, OF SAME PLACE.

## IMPROVEMENT IN HORSE-DETACHERS.

Specification forming part of Letters Patent No. 215,211, dated May 13, 1879; application filed February 13, 1879.

To all whom it may concern:

Be it known that I, FRANK M. DAY, of New Harmony, Brown county, Ohio, have invented a new and useful Improvement in Horse-Detachers for Vehicles and Agricultural Machinery, of which the following is a specification.

The object of my invention is to construct a horse-detaching apparatus both simple and durable, combining therewith efficiency with minimum cost.

Similar letters of reference indicate corre-

sponding parts in the drawings.

Figure 1 shows arrangement of parts for two horses; Fig. 2, for one horse. Fig. 3 is a bar connecting both ends of single-tree. Fig. 4 is a side view of spring-clip. Fig. 5 is the clip open. Fig. 6 is a top view. Fig. 7 shows the parts of the clip drawn separately.

The mode of operation of this appliance can be very easily understood by reference to draw-

mgs.

The first point to observe is the mode of op-

eration of the spring-clip.

Fig. 4 shows a clip attached by means of a perforated head, P, to the end of the singletree, with its latch B closed, the connected chain or trace-hook being shown in dotted lines. Fig. 5 shows the same with latch open, thereby disconnecting the chain or trace-hook.

It will be seen, by reference to all the parts drawn separately in Fig. 7, that the pin C has a perforated head, A. (Shown in all the drawings.) The slot k also is shown, in which the pin slides. The spiral spring is shown at E, and is placed behind the pin in the slot k, for the purpose of pushing it forward into its place to lock the latch B.

Now, in Fig. 4 the clip is closed and the trace chain or hook connected therewith.

It is obvious, without much further description, that when the head of the pin A is pulled to the right (see drawings) in its slot, thus disengaging the pin from the hole in the latch, it will permit the latch to turn on its hinge, thereby opening the loop of the clip, and assume the appearance shown in Fig. 5, permitting the chain-link or trace-hook to slide out and detach the horses from the vehicle, plow, or reaper.

The method by which the sliding pins in the clips at both ends of single-trees are connected

is shown in Figs. 2 and 3.

Links or hooks L, about three inches long, connect the perforated heads A of the pins with the ends of the bar H, as shown. A chain connected to the center of this bar can be carried to any convenient location within reach of the driver.

I claim as my invention, viz:

- 1. A clip constructed with a perforated head, P, to receive the single-tree, and provided with a hinged latch, constructed as shown, which is prevented from opening by the action of the pin C, in the manner and for the purpose described.
- 2. The combination of the bar H, links L, and pins C, in the manner and for the purpose described.

FRANK M. DAY.

Witnesses: W. R. MOORHEAD, MARY M. BALL.