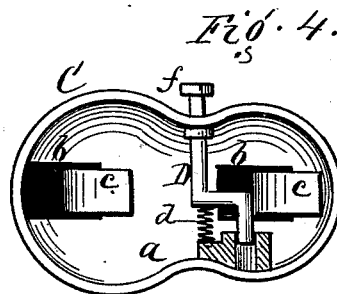
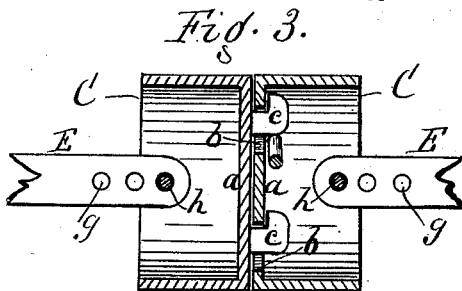
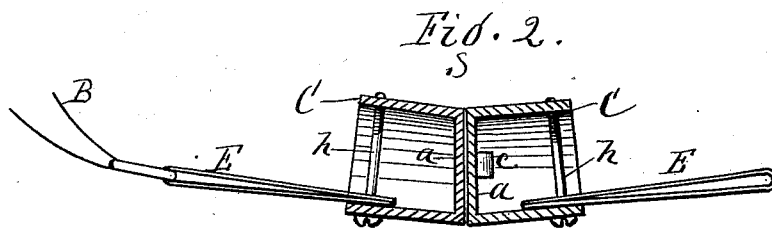
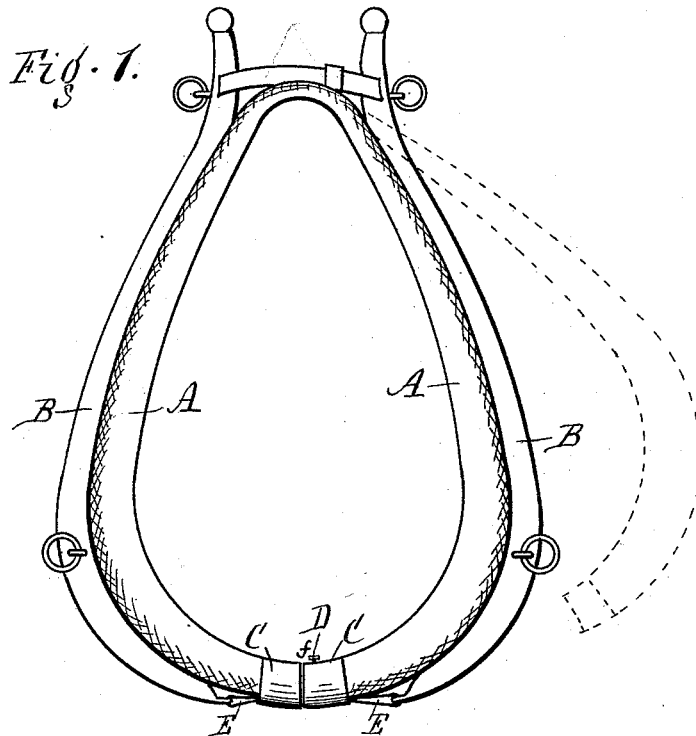


(No Model.)

D. STONE.
HORSE COLLAR FASTENER.

No. 421,986.

Patented Feb. 25, 1890.



Attest.
Chas. Juncos
& E. Shaffer

Inventor.
Draper Stone,
per R. E. Osgood,
att'y.

UNITED STATES PATENT OFFICE.

DRAPER STONE, OF PITTSFORD, NEW YORK.

HORSE-COLLAR FASTENER.

SPECIFICATION forming part of Letters Patent No. 421,986, dated February 25, 1890.

Application filed August 24, 1881. Serial No. 405,552. (No model.)

To all whom it may concern:

Be it known that I, DRAPER STONE, of
Pittsford, Monroe county, New York, have
invented a certain new and useful Improve-
ment in Horse-Collars; and I do hereby de-
clare that the following is a full, clear, and
exact description of the same, reference be-
ing had to the accompanying drawings, in
which—

Figure 1 is a front elevation of a collar,
showing my improvement. Fig. 2 is a cen-
tral vertical section of the coupling. Fig. 3
is a horizontal section. Fig. 4 is an end ele-
vation.

My improvement relates to couplings for
horse-collars which open in the center at the
bottom of the collar and in which the hames
are permanently attached to the collar, so
that in opening and removing the collar the
hames are removed with it.

The invention consists in the construction
and arrangement hereinafter more fully de-
scribed.

In the drawings, A A represent the two
halves of an ordinary horse-collar, which is
closed at the top, but open at the bottom.

B B are the hames, also of ordinary con-
struction.

C C are two metallic socket-pieces forming
the coupling, located at the bottom of the
collar and attached on the two opposite sides.
These couplings are formed hollow to fit on
the ends of the collar, to which they are firmly
secured. The inner adjoining ends of the
couplings have thin webs or butments *a a*
forming the surfaces which strike together.
In one of these butments are made two open-
ings *b b*, and in the other are two projecting
right-angled hooks *c c*, coincident in position.
The openings are of sufficient size to allow
the hooks to enter bodily, and when the hooks
are once entered a side movement carries the
hooks under the edges of the openings, and
this holds the coupling together.

D is a crank-shaped pin, which passes
through holes in the sides of the socket C,
the cranked end resting behind one of the
hooks *c* when inserted and holding the same
locked in place. The pin is held up behind

the hook by a spring *d*, and the pin has a
head *f*, which projects above the socket a
little distance, so that when the finger is
pressed down upon it the cranked end will be
forced down to release the hook. By this
means the hooks are readily inserted and
locked in place, and can be as readily dis-
connected.

E E are two metallic straps forming the
connections between the hames and the coup-
ling-sockets. They are made double, as
shown, one end being looped into the eye of
the hame and the other end being provided
with a series of holes *g g*, through any one of
which passes a screw *h*, which passes up
through the coupling-socket and holds the
strap in place. By this means it will be seen
that each hame is attached to its socket by
the strap and remains permanently with the
same, so that when the couplings are discon-
nected to remove the collar the hames re-
main upon the collar. The hames may be
taken up to fit smaller collars by removing
the screws *h h* and inserting them in differ-
ent holes in the straps. The straps forming
the connections may be of different form
from that shown and described, if desired,
the object being to make a connection be-
tween the hames and coupling-sockets that
can be taken up and let out at pleasure, and
which will make the hames an attachment
with the collar, so that all can be removed
together.

I am aware that collars are known in
which the lower ends of the collar are united
by a coupling which can be disengaged to
open the collar. I am also aware that collars
are known in which hames connected with
the collar have been coupled directly together
without connecting with a coupling at the
ends of the collar. The distinctive feature of
my invention consists of a coupling connect-
ing the ends of the collar, and straps extend-
ing from such couplings and attaching to the
hames, so that both parts are attached to-
gether and open together.

Having thus described my invention, I
claim—

In a horse-collar in which the hames are

permanently attached to the couplings of the collar, the combination of the two sockets C C, the metallic straps E E, connecting the hames with the sockets, the openings *b b* in
5 one of the sockets, and the hooks *c c* in the other socket, the hooks entering the openings and being secured in place by a locking-pin, as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

DRAPER STONE.

Witnesses:

R. F. OSGOOD,
G. H. JONES.