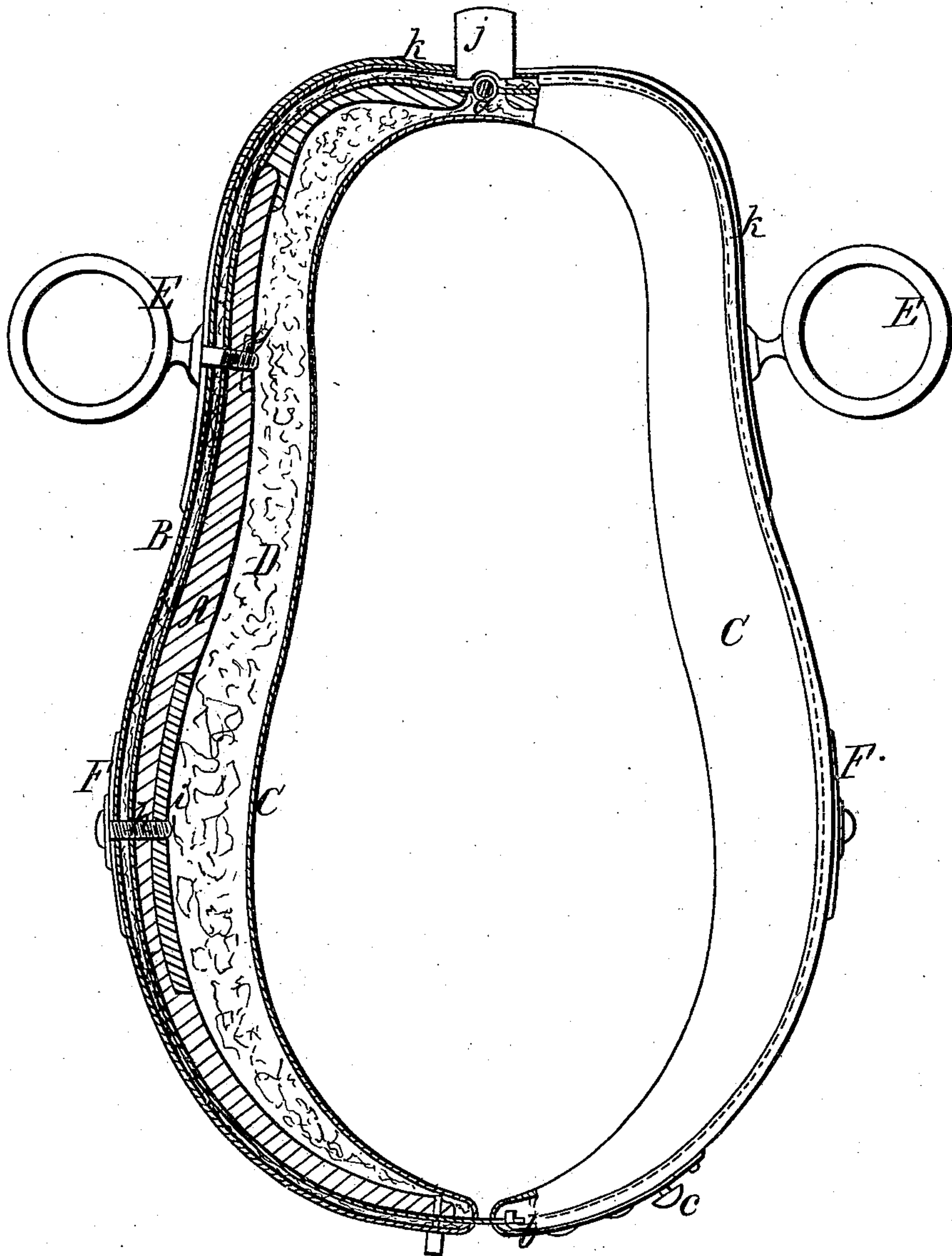


A. Ducastel,

Horse Collar.

No. 100,381.

Patented Mar. 1. 1870.



Inventor

A. Ducastel.

*Van Santvoord & Hauff
Atty.*

Witnesses

*E. F. Kastinhuber
L. Wahlers.*

United States Patent Office.

ARSÈNE DUCASTEL, OF NEW YORK, N. Y.

Letters Patent No. 100,381, dated March 1, 1870.

IMPROVEMENT IN HORSE-COLLARS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ARSÈNE DUCASTEL, of the city, county, and State of New York, have invented a new and useful Improvement in Horse-Collars; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, which drawing represents a sectional front view of my horse-collar.

This invention relates to a horse-collar, the hames of which are connected together by two strips of sheet metal, which are united at the top by a hinge-joint, and at the bottom by a spring-catch, in such a manner that by unlocking the spring-catch the collar can be opened and readily applied to the horse's neck, and at the same time a firm and durable connection for the hames is obtained, and the stability of the turrets and trace-couplings is materially increased.

From the hinge-joint at the top ends of the metal strips rises a square block of metal, which, in connection with the turrets, serves to steady and retain the cap of the collar.

In the drawing, the letter A designates one of the hames, which is made of wood, in the usual form, with the exception that it terminates below the top of the collar.

The hames are secured to the inner surfaces of strips B of sheet metal, and the top ends of these metal strips are united by a hinge-joint, *a*, while their bottom ends can be locked together by means of a spring-catch, *b*, which is opened by pressing on the button *c*.

The hames, together with the metal strips B, are

enveloped in a covering, C, of leather, and the neck of the horse is protected against abrasion or injury by a stuffing, D, of hair, straw, or other suitable material, in the usual manner.

The hinge-joint *a* allows of opening the collar so that it can be readily applied to the horse's neck, and the sheet-metal strips B not only serve to connect the hames, but they also increase the stability of the turrets E and the trace-couplings F, the shanks of the turrets being tapped into the metal strips and into nuts *g*, let into the inner surfaces of the hames, while the trace-couplings are secured to the hames by means of screws *h*, which are tapped into the metal strips B, and into nuts *i*, let into the inner surfaces of the hames.

From the middle of the hinge-joint *a* rises a square block, *j*, which serves to steady and retain the cap *k*, said cap being secured to the collar by the turrets E.

If desired, the inner surface of the hames may be protected by a piece of India-rubber cloth, or other suitable material, so that said hames will not sustain any injury from the sweat of the horse.

What I claim as new and desire to secure by Letters Patent, is—

The block *j*, rising from the hinge-joint *a*, which unites the metal strips B, and serving to steady and retain the cap *k* of the collar, substantially as set forth.

This specification signed by me this 4th day of August, 1869.

ARSÈNE DUCASTEL.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.