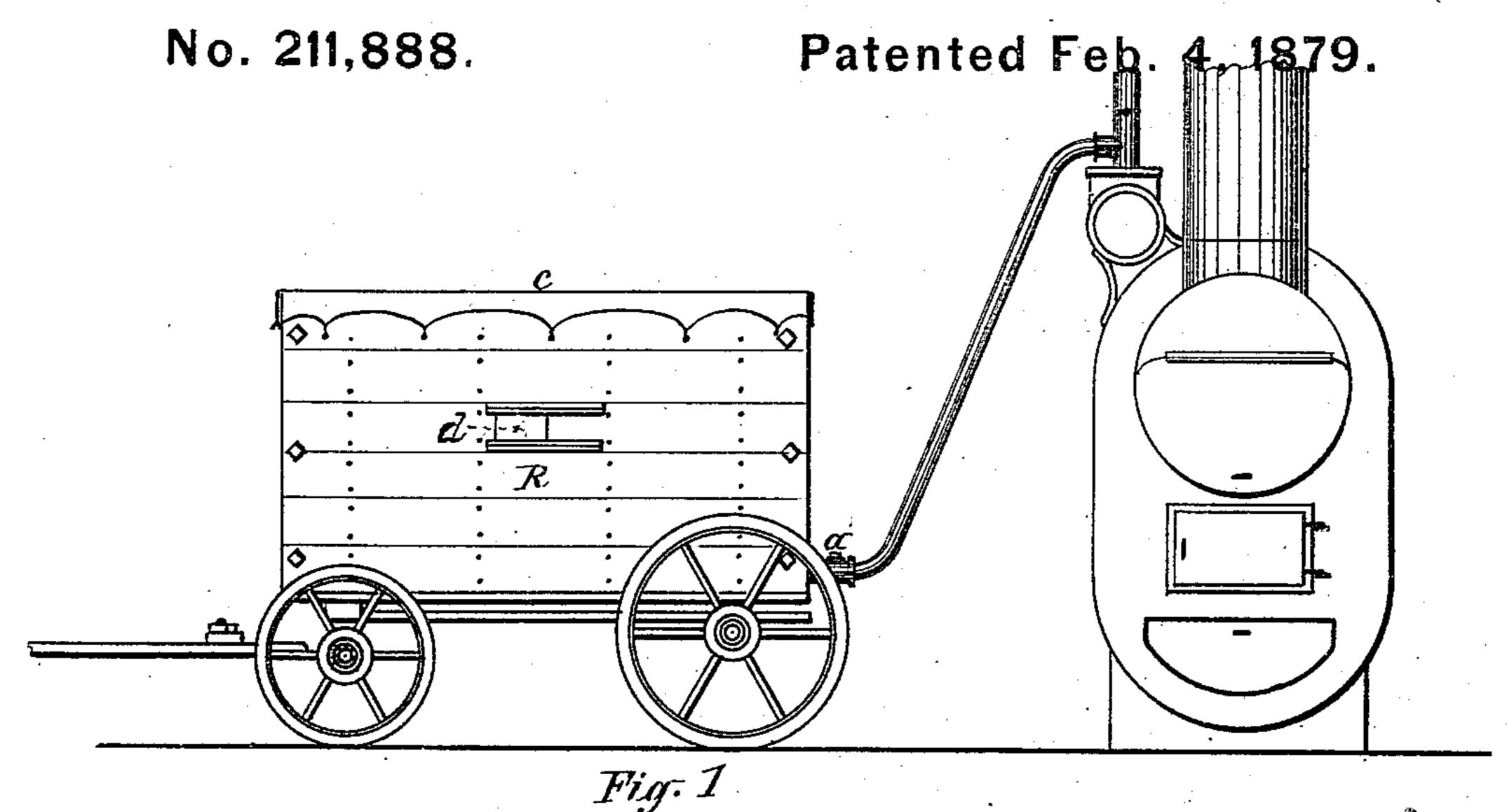
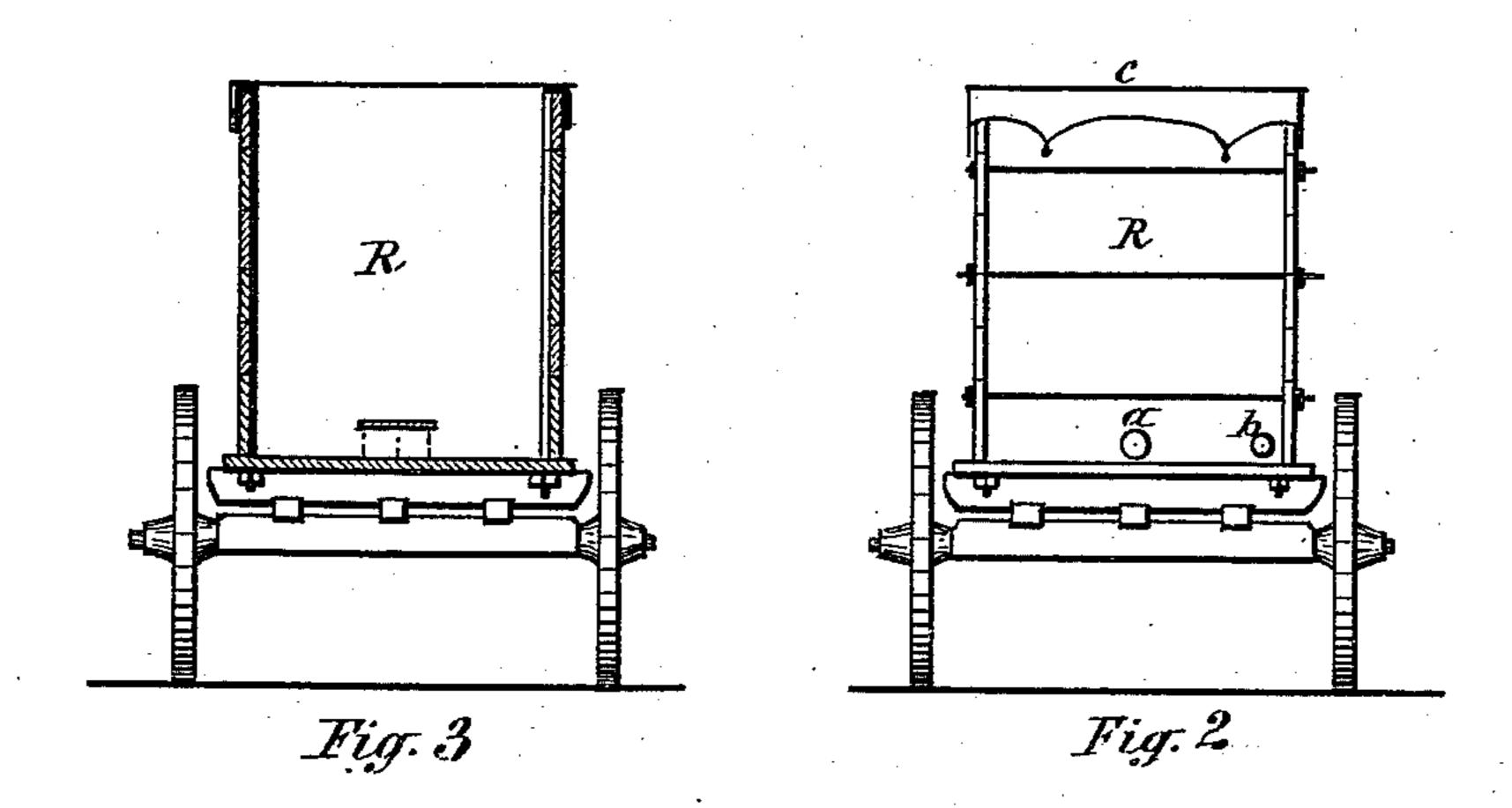
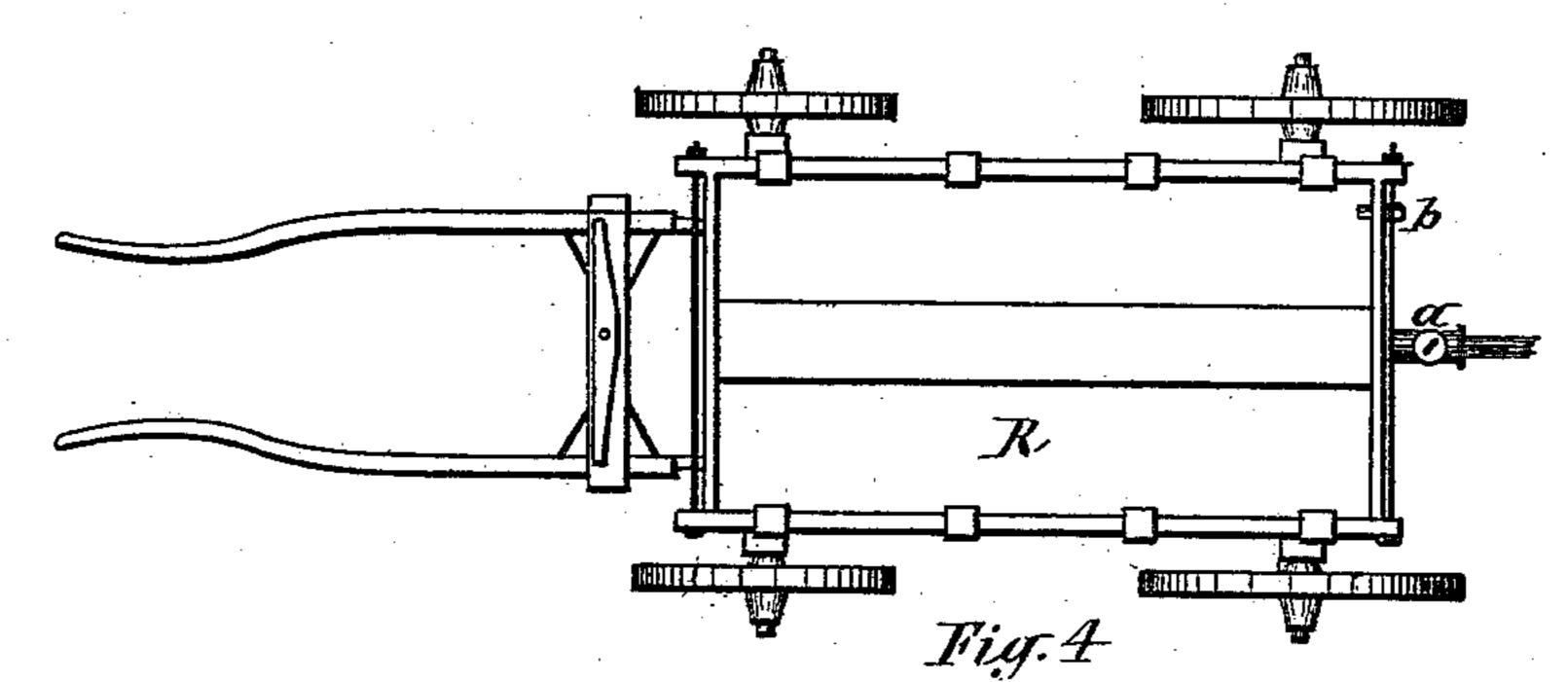
## A. H. CRAWFORD.

Treating Willows for the Manufacture of Wicker-Work.







WITNESSES:

Fred D. Watheys.

INYENTOR:

A. Herbert Crawford per E. Laass his Atty.

## UNITED STATES PATENT OFFICE.

## A. HERBERT CRAWFORD, OF LIVERPOOL, NEW YORK,

IMPROVEMENT IN TREATING WILLOWS FOR THE MANUFACTURE OF WICKER-WORK.

Specification forming part of Letters Patent No. 211,888, dated February 4, 1879; application filed December 14, 1878.

To all whom it may concern:

Be it known that I, A. HERBERT CRAW-FORD, of the village of Liverpool, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Apparatus and Process for Treating Willows for the Manufacture of Wicker-Work, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

The invention consists, essentially, in a novel mode and means of furnishing steamed willows in a better condition and with less manual labor to manufacturers of baskets and other wicker-work, situated remotely from a steam-generator or steam-supply, all as here-

inafter fully described.

Baskets being generally manufactured by private operatives and small manufacturers, who do not employ steam-power, economy and competition in the trade makes it necessary for these manufacturers to send their willows to establishments using steam-power, where they utilize the exhaust-steam for steaming the willows. This has hitherto been accomplished by means of a stationary steaming-chamber, provided for the purpose, near the steam-supply. The willows were delivered there and introduced in the steamingchamber. After completion of the steaming process they were removed therefrom and delivered by ordinary conveyance to the consumer, who, on their arrival, drenched them with water, for the purpose of loosening the bark and maintaining the flexibility and pliability of the willows. However, since exposure to the air and cooling of the willows prior to their drenching or saturation in water has a tendency to dry the willows and set the bark on the wood, the aforesaid treatment has proved detrimental to the attainment of the desired object.

It is to obviate these deteriorating effects, and at the same time save a great portion of the manual labor required in the said treatment of cut willows, that my invention is de-

signed.

In the accompanying drawings, Figure 1 is a side view of my improved steaming appa-

ratus in position for receiving steam. Fig. 2 is a rear-end view of same; Fig. 3, a vertical transverse section, and Fig. 4 a top view with the cover removed.

Similar letters of reference indicate corre-

sponding parts.

R represents the case or receptacle for the willows to be steamed. It is mounted on wheels or runners, according to the condition of the roads, and provided with a suitable inlet, a, for the steam, which inlet is adapted to be readily connected and disconnected with the exhaust-pipe of a steam-engine or other suitable steam-supplier. Its top is provided with a rememble cover

with a removable cover, c.

This steaming apparatus being transportable over ordinary roads, the willows can be carried in it to the steam-supply, there steamed, and then delivered to the consumer, without either handling or exposing them to the air from the time they are loaded onto the apparatus until their return to the consumer. The water may be applied to the willows before their removal from the steaming-chamber, which is provided with an outlet, b, for the water thus introduced, as well as for that created by condensation of the steam. By using cloth for the removable cover c, the steam is sufficiently retained in the chamber R without adding much weight to the conveyance.

To obtain access to the willows for observation and examination during the steaming process without removing the cover c, I provide the sides of the steaming-chamber with an aperture closed by either a glass or a removable plate, d, as shown in Fig. 1 of the

drawings.

Having described my invention, what I claim is—

1. The receptacle R, mounted on wheels or runners, and provided with a steam-inlet, a, water-outlet b, and removable cover c, substantially as described and shown, for the purpose set forth.

2. The within-described mode of furnishing steamed willows to consumers situated remotely from the steam-supplier, consisting in conveying the willows in a box or receptacle

to a steam-supplier, upon their arrival there closing the said box on all sides, and introducing therein the steam, and at the completion of the steaming process delivering the steamed willows, inclosed as aforesaid, to the consumer, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand this 10th day of December, 1878.

## A. HERBERT CRAWFORD.

Witnesses:

C. BENDIXEN,

J. Johnson.