

(No Model.)

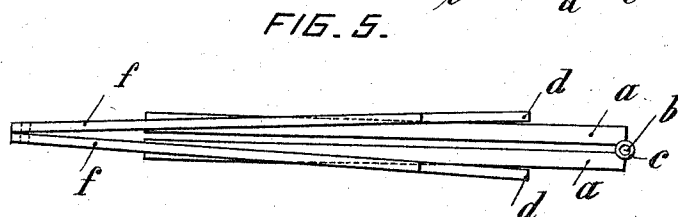
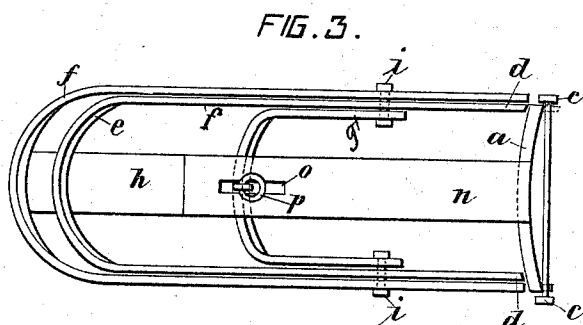
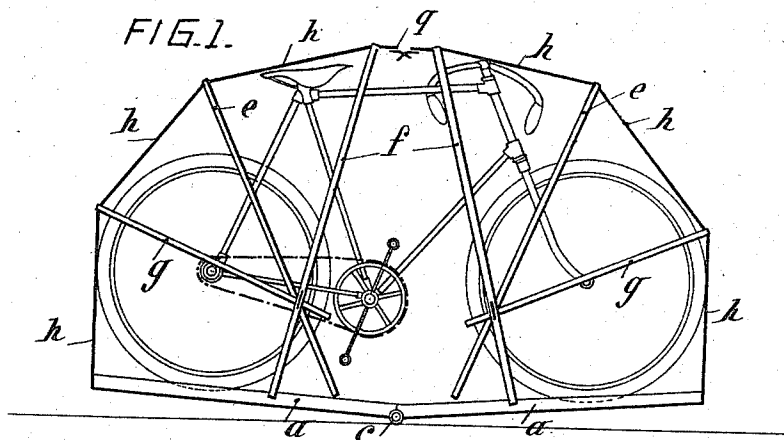
2 Sheets—Sheet 1.

E. VINCENT.

FOLDING CRATE FOR TRANSPORTING AND HOUSING BICYCLES.

No. 580,514.

Patented Apr. 13, 1897.



Witnesses:
L. M. Nachschlager,
Geo. C. Morse.

Inventor
Eugene Vincent,
by Briesen Knautz
his Attorneys.

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2 Sheets—Sheet 2.

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FIG. 2.

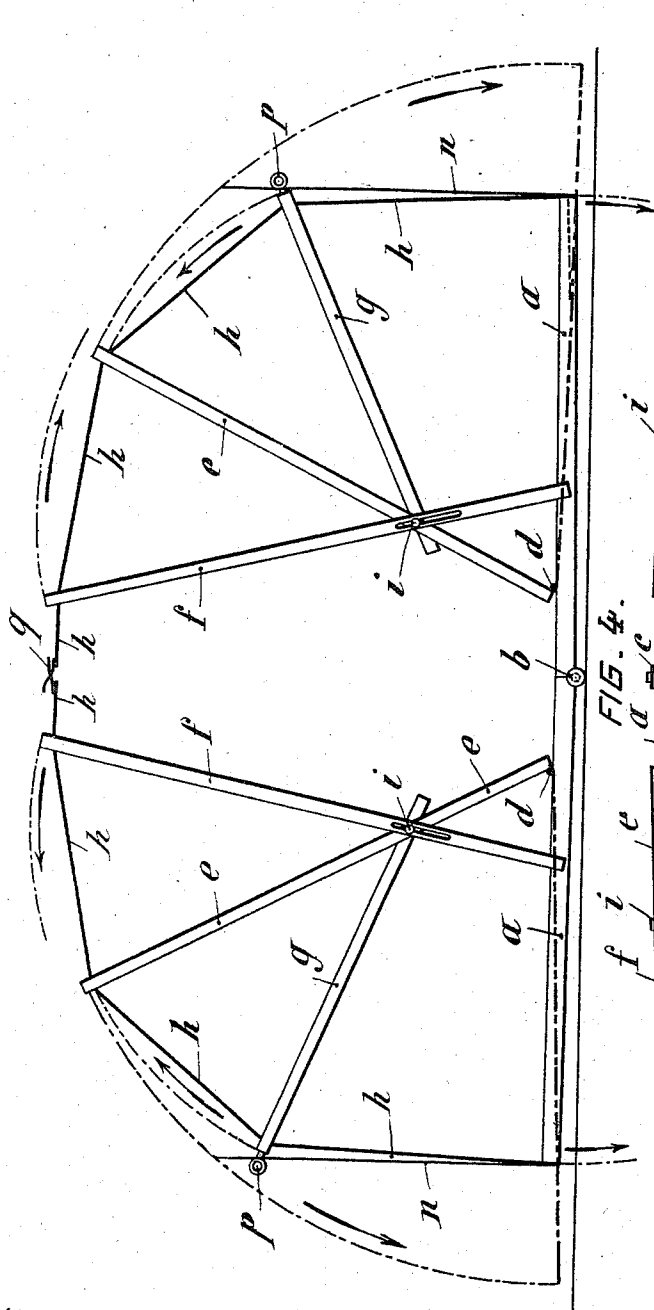
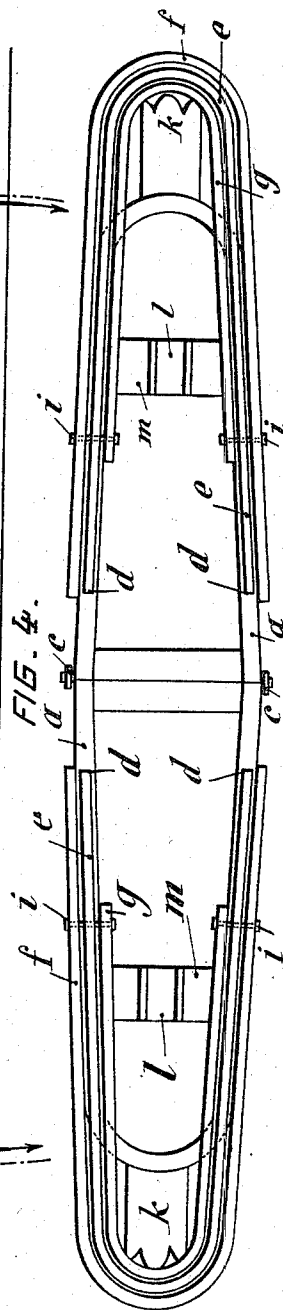


FIG. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

EUGÈNE VINCENT, OF PARIS, FRANCE.

FOLDING CRATE FOR TRANSPORTING AND HOUSING BICYCLES.

SPECIFICATION forming part of Letters Patent No. 580,514, dated April 13, 1897.

Application filed January 11, 1897. Serial No. 618,698. (No model.) Patented in France June 30, 1896, No. 257,733, and in Belgium September 10, 1896, No. 123,460.

To all whom it may concern:

Be it known that I, EUGÈNE VINCENT, of the city of Paris, France, have invented a Folding Crate for the Transport and Housing of Bicycles, (for which I have obtained Letters Patent in France for fifteen years, dated June 30, 1896, No. 257,733, and in Belgium for fifteen years, dated September 10, 1896, No. 123,460,) of which the following is a full, clear, and exact description.

This invention relates to a folding crate for the transport and housing of bicycles. The particular advantages of this improved crate are that it is light, easily and quickly erected or collapsed, occupies small space, and protects the machine from damage during transport.

In order that the invention may be readily understood, I have illustrated it by way of example in the accompanying drawings, in which—

Figure 1 represents a front elevation of the crate, inclosing a bicycle for transport. Fig. 2 is a front view, and Fig. 3 an end view, of the crate alone. Fig. 4 is a plan of the crate collapsed in the flat. Fig. 5 shows the crate folded up.

The same letters of reference denote like parts in all the figures.

The crate consists, essentially as shown, of a bottom *a* of two parts hinged at *b*, provided with rollers *c* on the ends of the joint-pin. Upon the base-board *a* at points *d d*, symmetrically disposed, are jointed skeleton frames, each composed of hoop-shaped members *e f g*, connected together and to the bottom board *a* by webs *h*. The hoop *e* is jointed to the bottom board *a*, while the hoops *f* and *g* are jointed at *i* to the hoop *e*, the hoop *f* folding down outside and the hoop *g* inside the hoop *e*. The hoop *g* is provided with a grooved guide *k*, in which the bicycle-wheel is received, as well as in a groove *l* in a cross-bar *m* on the bottom board *a*. At each end of the bottom board *a* is also mounted a tongue-piece *n*, slotted at *o* to receive a ring *p*, pivoted on the hoop *g*, by means of which the tongue-piece is kept vertical and also serves for lifting the crate. The ends of the webs *h* are united to maintain the hoops in posi-

tion by means of straps *q*, or by lacing-studs and eyelets, or in other suitable manner.

To insure increased rigidity, the lower ends of the hoops or members *f* may be caused to engage with ratchet-teeth at either side of base-board *a*. Straps may also be provided at suitable points on the inside of the hoops to prevent the cycle from shaking during transport. The members *f* may be slotted, so as to enable the height of the crate to be increased to suit the cycle without dismantling either the saddle or steering-handles.

The apparatus such as herein described may be entirely covered with canvas, leather, moleskin, or other suitable material to protect the cycle from damp or dust.

The operation is as follows: The crate having been laid out flat, as shown in Fig. 4, the cycle is placed thereon with its wheels in guides *l*. The ends of webs *h* are then pulled up to simultaneously raise the hoops and form the two hoods represented in Fig. 2. After having united the straps the sliding pieces *n* are drawn out of their grooves and raised to a vertical position to protect the tires and then secured by means of rings *p*. The cycle when thus packed may be moved from place to place either by trundling the crate upon its rollers or carrying it by the rings and is entirely protected from injury during transit.

To remove the cycle from the crate, it is simply necessary to detach and return the end pieces *n* to their grooves and to unfasten the straps *q*, so that the hoops may fold down one within the other, as indicated by the arrows in Fig. 2. After removing the cycle the bottom *a* is folded together in the direction indicated by the arrows at the lower part of Fig. 2, so as to form a package of small compass, as shown in Fig. 5, and may be stowed anywhere.

The crate may be used not only for the transport of cycles, but also be suspended vertically in rooms, warehouses, &c.

The crate may be arranged to contain several cycles placed side by side, and it may also serve for packing all kinds of light vehicles.

The crate is preferably made of bent wood, but it will be understood that the forms, di-

mensions, details, and materials employed in its construction may be varied without affecting in any manner the principle of my invention.

5 I claim—

A system of folding crate for the transport of bicycles consisting of a base-board *a* mounted on rollers *c* and hinge-jointed at *b* so as to fold together, in combination with
10 hoop-frames *e, f, g* jointed at *d* and *i* so as to form two symmetrical hoods united by a band *h* by means of lacing or straps *q* and adapted

to fold down horizontally within one another when the crate is not in use, all substantially as hereinbefore described and illustrated in 15 the accompanying drawings.

The foregoing specification of my folding crate for the transport and housing of bicycles signed by me this 24th day of December, 1896.

EUGÈNE VINCENT.

Witnesses:

EDWARD P. MACLEAN,
ALBERT MOREAU.