

(No Model.)

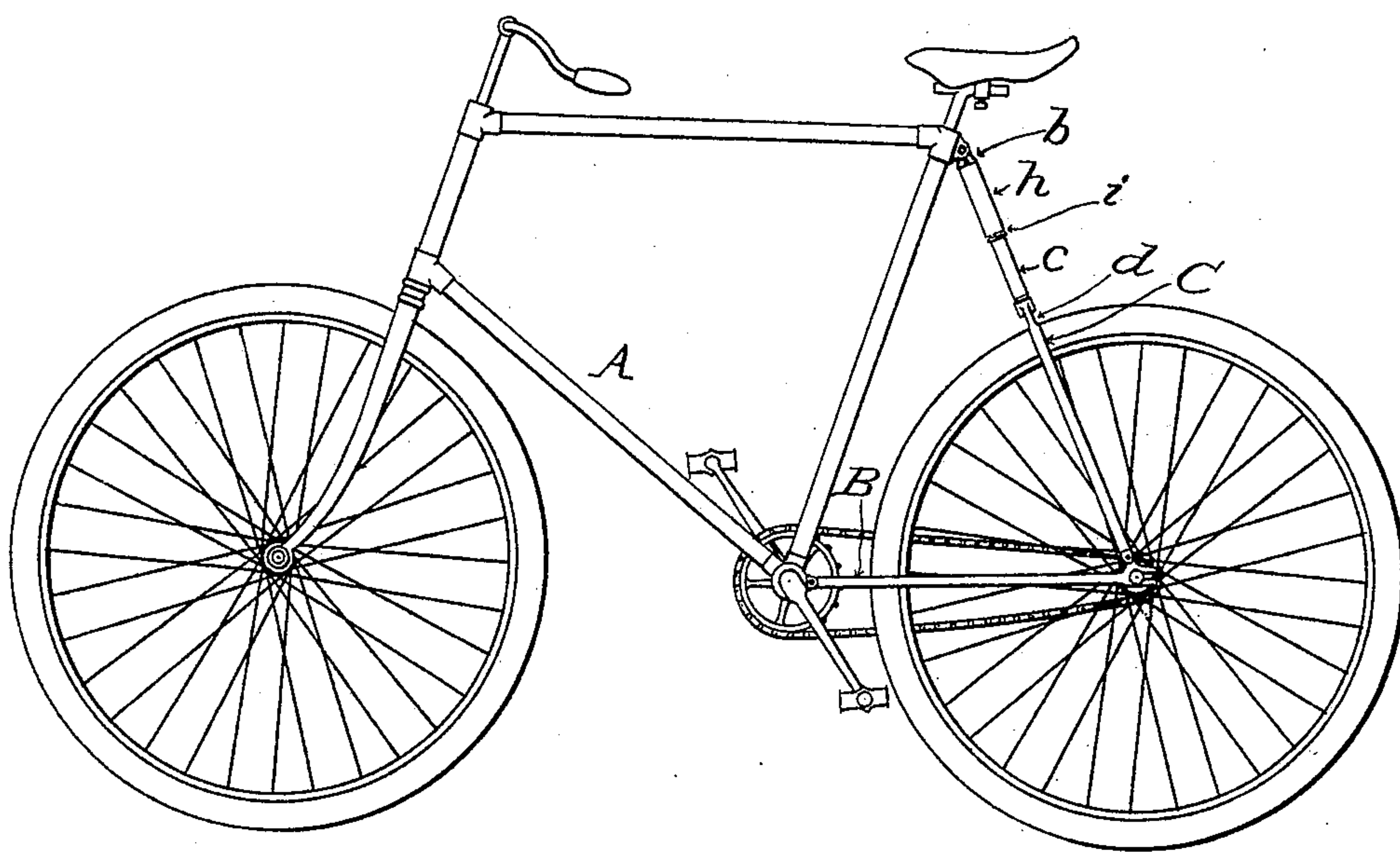
2 Sheets—Sheet 1.

C. L. TRAVIS.
BICYCLE OR LIKE VEHICLE.

No. 583,345.

Patented May 25, 1897.

Fig. 1.



*Attest,
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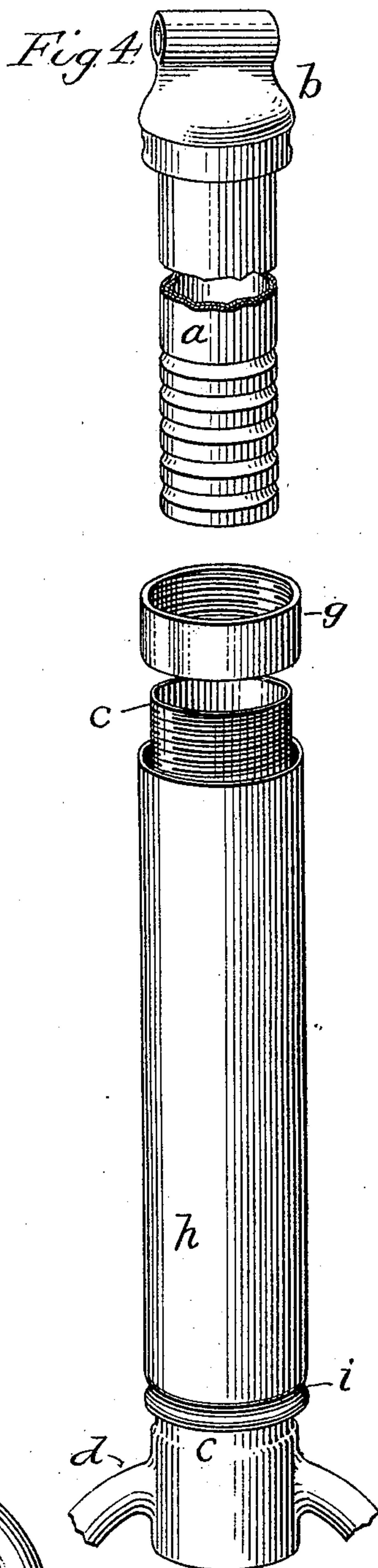
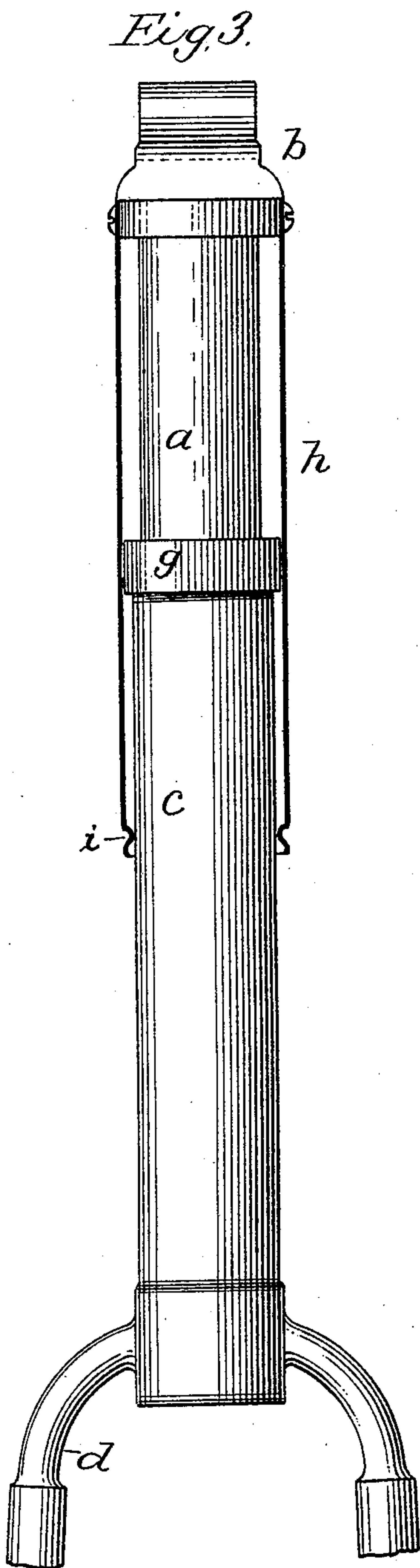
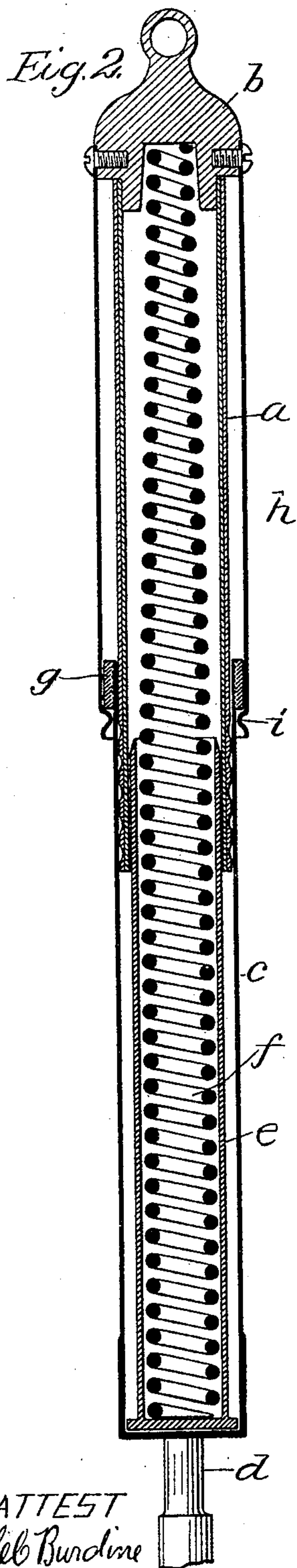
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No. 583,345.

Patented May 25, 1897.



INVENTOR:
By Charles L. Travis,
Dodger & Sons,
ATTYS.

UNITED STATES PATENT OFFICE.

CHARLES L. TRAVIS, OF MINNEAPOLIS, MINNESOTA.

BICYCLE OR LIKE VEHICLE.

SPECIFICATION forming part of Letters Patent No. 583,345, dated May 25, 1897.

Application filed May 23, 1896. Serial No. 592,794. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. TRAVIS, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Bicycles or Like Vehicles, of which the following is a specification.

My invention relates to bicycles and the like, the present device being an improvement on the construction set forth in Letters Patent No. 564,546, granted to me on the 21st day of July, 1896.

In the accompanying drawings, Figure 1 is a side elevation of a bicycle embodying my invention; Fig. 2, a longitudinal sectional view of the telescopic brace; Fig. 3, an elevation of brace, partly in section; and Fig. 4, a perspective view showing the several members separated.

So far as the general structure and purpose of the invention are concerned the present device is in most particulars the same as that shown and described in the patent just alluded to.

Referring to Fig. 1, A indicates a front frame comprising the steering-fork head, a pillar-post, and two connecting bars or braces, as in the common diamond frame at present so generally used.

B indicates a rear-wheel fork hinged or flexibly connected to the front frame A at or near the pedal-shaft barrel, and C a brace extending from the rear portion of fork B to the upper rear portion of frame A, to both of which it is jointed and flexibly connected. This brace comprises two tubular sections, telescoping or sliding one within the other, and an interposed spring designed to permit a movement of the rear-wheel fork and its wheel without affecting the front frame or the saddle carried thereon.

The construction of the shell *a*, cap or plug *b*, shell *c*, forming the upper member of the fork *d*, cup *e*, and spring *f* are just the same in all particulars, with the exception of a slight addition to the shell *c*, as the similar parts set forth in detail in my former application.

Under the present construction I thread the upper end of the tube *c*, and upon it is screwed a collar or washer *g*.

As under the previous construction an outer covering-tube or shell *h* is employed, but instead of forming a recess at or near the lower end of the tube and fitting a washer therein I form an inwardly-turned shoulder *i* at the lower end of said tube. The upper end of the shell is designed to be secured to the cap *b* by screws, as shown.

The tube *h* has a mechanical fit in relation to the collar or washer *g*, so that when the parts are lubricated a confined air-chamber will be formed between the tube *a*, shell *h*, and washer or collar *g*.

Fig. 4 illustrates the method of assembling the parts.

The shell *h* is dropped down over the tube *c* and the collar *g* then securely screwed upon the upper end of the tube. The spring and cup are then put in place and the tube *a* entered between tube *c* and cup *e*. The shell *h* is then drawn up and secured to cap *b* by screws, and when in such position the shoulder *i* impinges against the under edge or face of the collar *g*. This is the position when the parts are fully extended, the engagement of the collar and shoulder preventing the separation of the parts and forming a stop against further extension. This relation of the parts is shown in Fig. 2.

When the rider is seated upon the machine, the spring will be slightly compressed and the parts will assume the position shown in Fig. 3. In this position the shoulder *i* and the collar are out of contact, and will remain so so long as the weight of the rider is upon the machine.

The formation of the stop in the yielding member of the frame does away with the necessity of a stop-joint at the pivotal point of the rear fork to the front frame. Aside from this advantage the additional air-space which is secured is of material importance and benefit.

Under the construction of the machine set forth in Letters Patent Nos. 564,319 and 564,546, granted to me on the 21st day of July, 1896, a special form of locking device was employed at the pivotal point of the rear fork to the front frame. From actual use I find that the stop placed upon the telescoping tubes is preferable for many reasons to the stop set forth in those patents.

Having thus described my invention, what I claim is—

1. In combination with a rigid front frame; a rear-wheel fork flexibly connected with said
5 frame; a brace flexibly connected with the rear-wheel fork and with the front frame, and comprising two telescoping tubes fitting air-tight; a collar upon the end of the inner
10 tube; and a shoulder swaged in the outer telescoping member at a point adjacent to its end adapted to engage with the collar upon the inner tube, thereby forming a stop.

2. The herein-described brace or support

for bicycles and like vehicles comprising a shell *a*, with its cap *b*; shell *c* provided with 15 collar *g*; spring cup or case *e*; spring *f*; and outer shell or case *h* provided with shoulder or projection *i*, all combined and arranged to operate substantially as set forth.

In witness whereof I hereunto set my hand 20 in the presence of two witnesses.

CHARLES L. TRAVIS.

Witnesses:

E. I. THOMAS,

W. E. GERRISH.