(No Model.)

3 Sheets—Sheet 1.

J. RAGOUCY.

VELOCIPEDE.

No. 506,727. Patented Oct. 17, 1893.

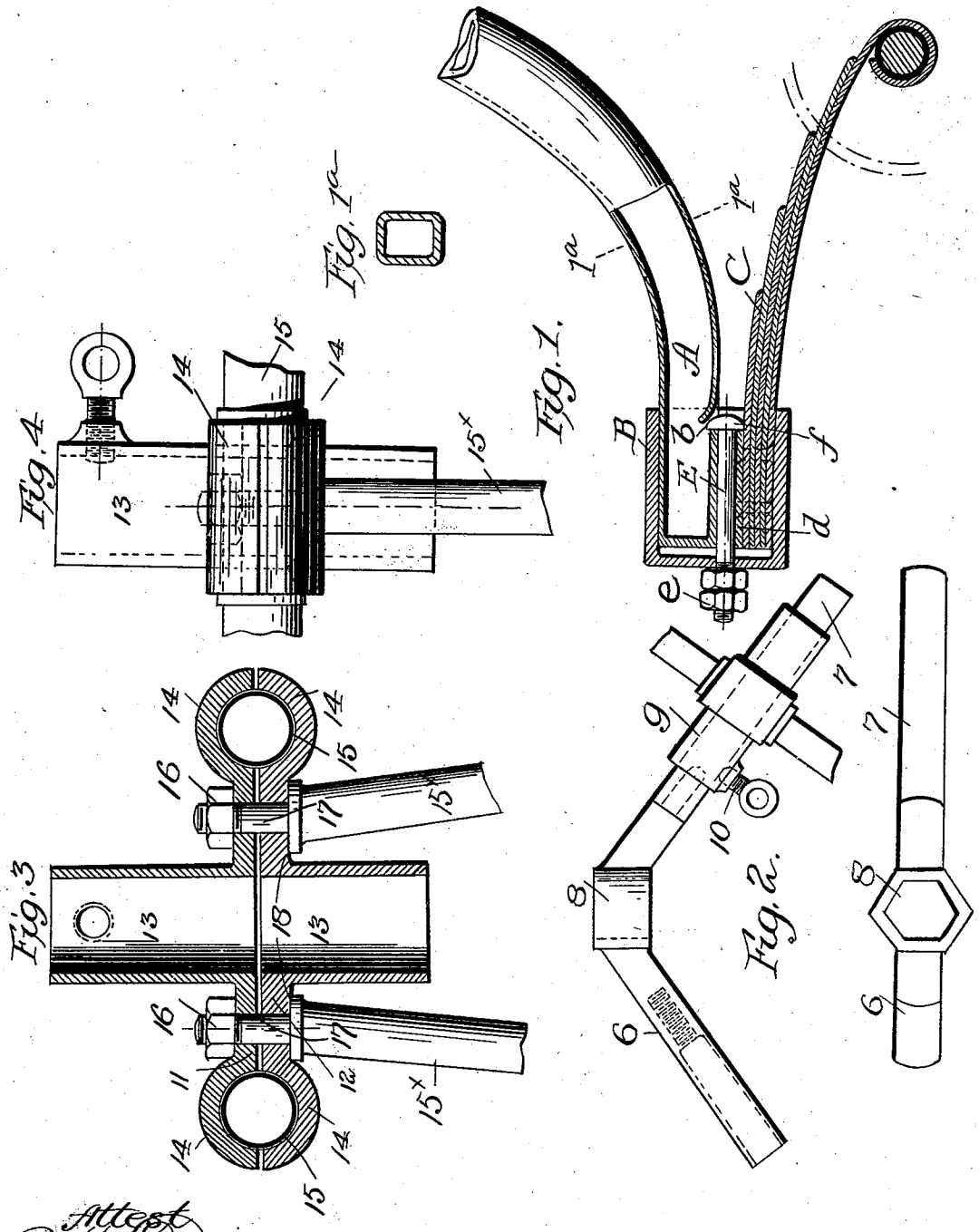

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Fig. 5.

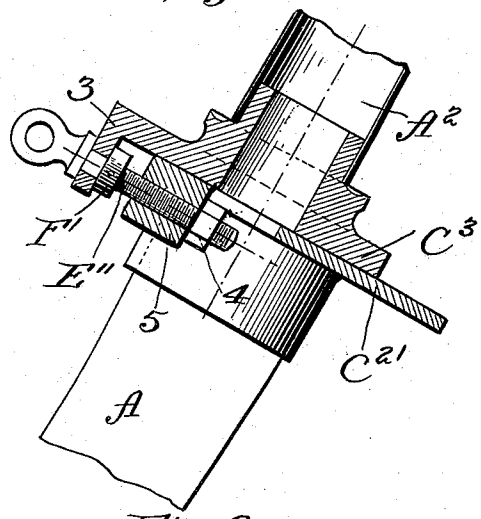
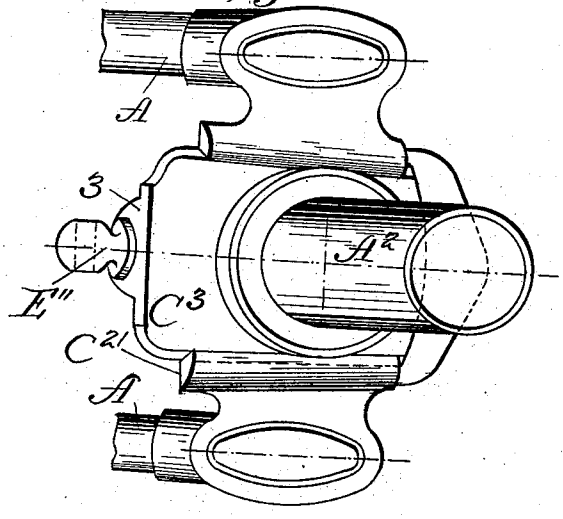


Fig. 6.



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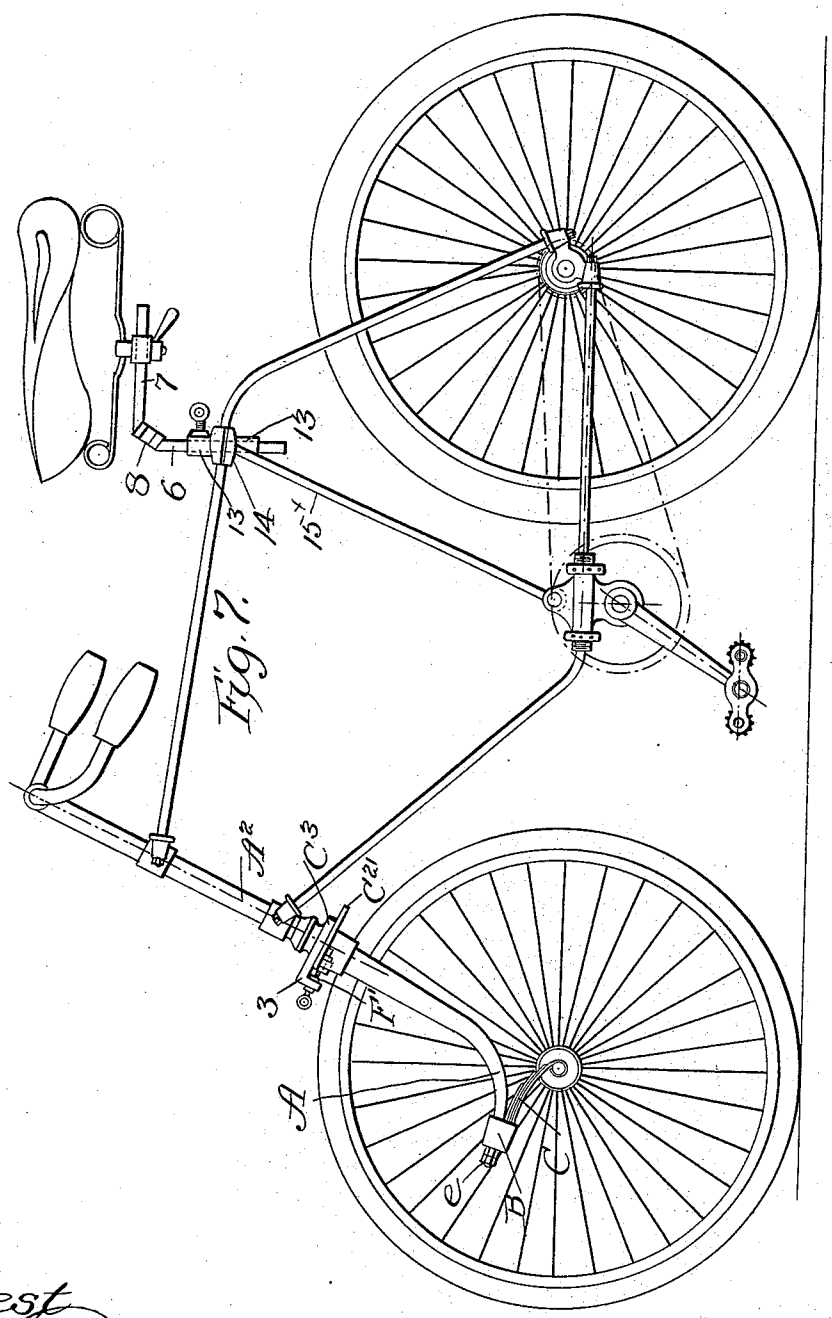

Fig. 7.

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UNITED STATES PATENT OFFICE.

JOACHIM RAGOUCY, OF PARIS, FRANCE.

VELOCIPEDE.

SPECIFICATION forming part of Letters Patent No. 506,727, dated October 17, 1893.

Application filed December 20, 1892. Serial No. 455,858. (No model.)

To all whom it may concern:

Be it known that I, JOACHIM RAGOUCY, a citizen of the Republic of France, residing at Paris, France, have invented certain new and useful Improvements in Velocipedes, of which the following is a specification.

It is the object of my invention to improve the frame of the machine generally in order to secure a resilient action of the front fork and handle bars and prevent vibration of the machine; to provide a two part detachable form of head; and an improved form of seat bar socket and saddle bar therefor.

In the accompanying drawings:—Figure 1, is a part side view and a part sectional view of the lower end of the front fork and the spring connection between the same and the wheel. Fig. 1^a is a sectional view of the fork arm on line 1^a—1^a of Fig. 1. Fig. 2, is a side and plan view of my improved saddle bar and wrench combined. Fig. 3, is a sectional view through the socket for the saddle bar. Fig. 4, is a side view of the same. Fig. 5 is a detail sectional view of the detachable joint for the two part head, and Fig. 6, is a plan view of the same. Fig. 7, is a view of the entire machine having my improvement in place.

In Fig. 1, A, is the lower end of the tubular fork provided with a notch *b*, formed by bending the metal wall inwardly. The said lower end is preferably square in cross section as shown in Fig. 1^a, and is held in a case or box B, of similar section and slightly conical to correspond with the tapered form of the squared end of the fork, by a bolt E, the head *f*, of which engages the notch *b*, and the shank extends through the end of the case to be held adjustably by the nut *e*. The head *f*, also engages the end of the plate *d*, riveted to the platform spring C, which latter is thus held in the casing also by the bolt the free end of the spring extending to the axle of the front wheel to serve as a yielding bearing therefor. The rear wheel may be journaled to the frame in the same way. The detachable connection between the fork and the head is shown in Figs. 5, and 6. This consists of a cross plate C^{21}, extending between the upper ends of the members of the fork A, and having a dove-tail groove or socket in its upper face adapted to receive a corresponding cross plate C^3, fixed on the lower end of the front post or head A^2, and having a depending lip 3, to receive a holding and adjusting bolt E″, which passes also through a similar lip 5, on the cross plate C^{21}, of the forks. The screw bolt has a shoulder F′ which maintains it in position and is provided also with a nut 4, bearing against the lip 5. I do not wish to limit myself to the precise arrangement shown as the cross plate C^{21}, may be arranged on the head while the plate C^3, may be on the fork members. The screw may be double threaded if desired and minor changes made without departing from the spirit of my invention.

Fig. 2, shows my combined saddle bar and wrench which consists of the hollow rods 6—7 arranged at an angle to each other, the wrench eye 8, being formed at the junction of the two rods. The sleeve for adjustably holding the seat is shown at 9, as held by a set screw 10. The removal of this permits the bar to be used as a wrench.

Figs. 3 and 4 show the removable socket for the saddle bar consisting of the upper and lower members 11, 12, each having a central vertical socket portion 13, and a laterally arranged semi-circular bearing 14, adapted to embrace the hollow tubes 15, of the frame, the parts being clamped together by the nuts 16, on the threaded extensions 17, of the parts $15^\times$ of the frame, said extensions passing through openings in the upper and lower members. Shoulders 18, are provided to afford good bearings for the lower members.

I claim—

1. In combination, the fork, the wheel, the yielding medium between the said wheel and the forks and the box or case for holding the said yielding medium to the fork, substantially as described.

2. In combination, the fork, the wheel, the spring between the forks and the wheel, the socket for receiving the fork and the spring and the holding bolt engaging both the fork and the spring for retaining them in place, substantially as described.

3. In combination, the fork, the wheel, the spring C, between the fork and the wheel, the socket adapted to the end of the fork and spring and the bolt having its head engaging the spring and a notch in the fork, substantially as described.

4. In combination, the fork, the head, in alignment with each other and the detachable connection between them consisting of the short dove-tailed plates adapted to be disconnected by sliding one plate on the other and the adjusting bolt, substantially as described.

5. In combination, the fork having a plate extending between its members and provided with a recess, the head having a plate on its lower end adapted to said recess the said plates having depending lips and means for holding the plates together, consisting of the screw passing through the depending lips of the plates, substantially as described.

6. In a velocipede, the combination of the frame, and the saddle bar consisting of angular members having the wrench opening 8, at their junction, substantially as described.

7. In combination, the frame bars 15, and $15^{\times}$ and the seat bar socket comprising the upper and lower members 11, 12, having the central cylindrical portions 13, in alignment and the laterally arranged clamping jaws 14, to embrace the bars 15, and having also the perforations to receive the extensions on the bars $15^{\times}$, substantially as described.

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

JOACHIM RAGOUCY.

Witnesses:
I. T. FAUR,
MONTRESCLAF.