

N^o 18,768



A. D. 1903

(Under International Convention.)

Date claimed for Patent under Patents Act, 1901,
being date of first Foreign Application (in } 2nd Sept., 1902
Switzerland),

Date of Application (in the United Kingdom), 31st Aug., 1903

Accepted. 17th Dec., 1903

COMPLETE SPECIFICATION.

Improvements in Flying Machines.

I, MAX BOURCART, a Manufacturer, of Pension de Chalet, Duchy in the Swiss Republic, do hereby declare the nature of my invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:

- 5 This invention relates to an improved flying machine constructed in such a manner as to be less cumbersome than is usual with machines of the kind.
- In the annexed drawings Fig. 1 is an elevation of one form of the invention, Fig. 2 a plan view of the wings or blades and Fig. 3 a section on the line 3—3 of Fig. 2.
- 10 The machine shown in Fig. 1 comprises a frame *a* supporting a doubly cranked shaft *b* provided with pedals. Each end of the shaft *a* is connected to a shaft *c* by means of bevel gear. To the end of each shaft *c* are fixed two radial helical wings in planes perpendicular to the said shafts.
- The shafts *c* are inclined with regard to each other and the two pairs of wings are fixed thereto in such a manner that the one pair is at an angle of 90° to the other, as shown in Fig 2; and that when the two shafts *c* are revolved by means of the shaft *b* the wings of one can pass through the intervals of the other, and *vice versa*, without the wings of one pair coming into contact with the wings of the other pair,
- 20 As shown in Figs. 2 and 3 the wings resemble in shape as nearly as possible the wings of birds. Each wing has a rigid curved outer edge, as shown in Fig. 3, and can be articulated at *d* like the wing of a bird, so that the wings are foldable on themselves. The machine shown in the drawings is adapted to be operated by the user alone, but it can of course be provided with
- 25 a motor or motors adapted to revolve the shaft *b*.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:

A flying machine having two helical pairs of wings radially and normally
[Price 8d.]

Bourcart's Improvements in Flying Machines.

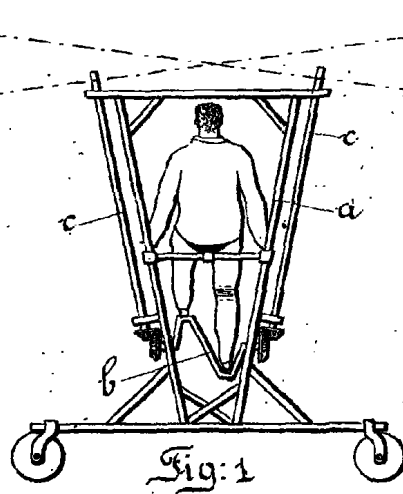
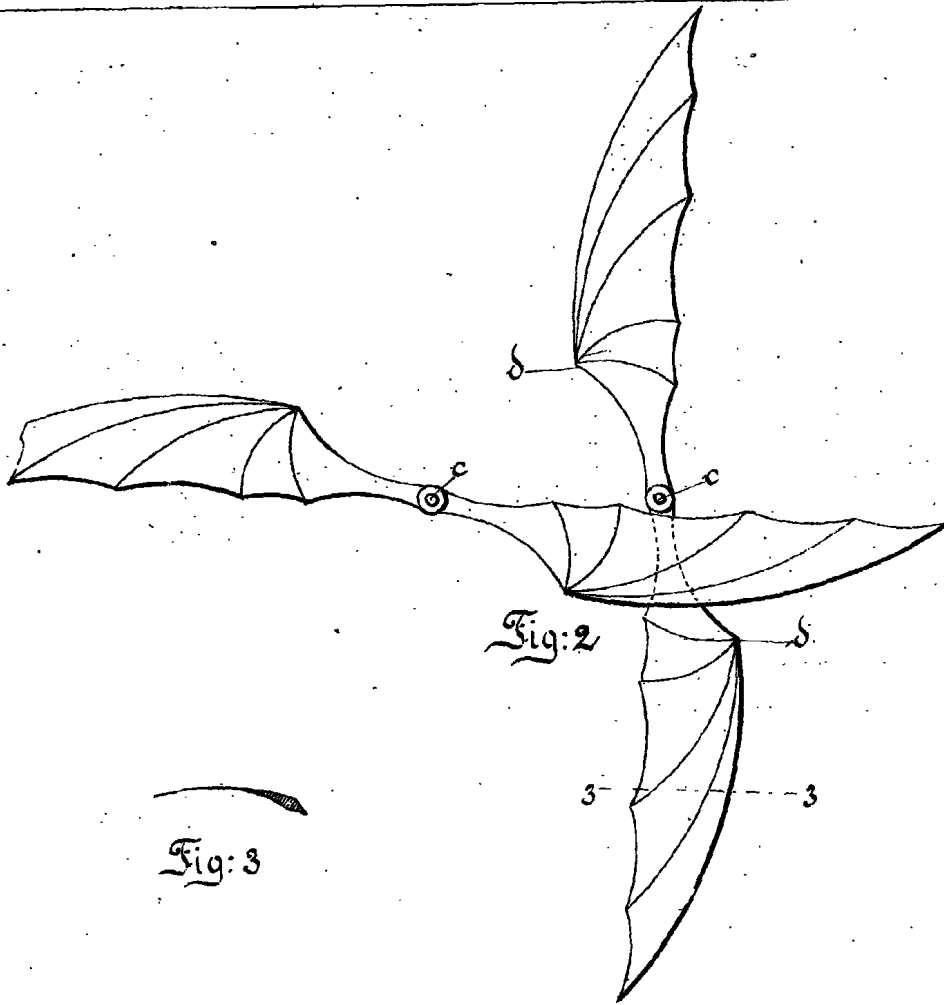
fixed to two coupled shafts inclined with regard to each other in such a manner that when the two pairs of wings revolve, the wings of one pair can pass through the intervals between the wings of the other pair without coming into contact with the latter.

Dated this 31st. day of August 1903.

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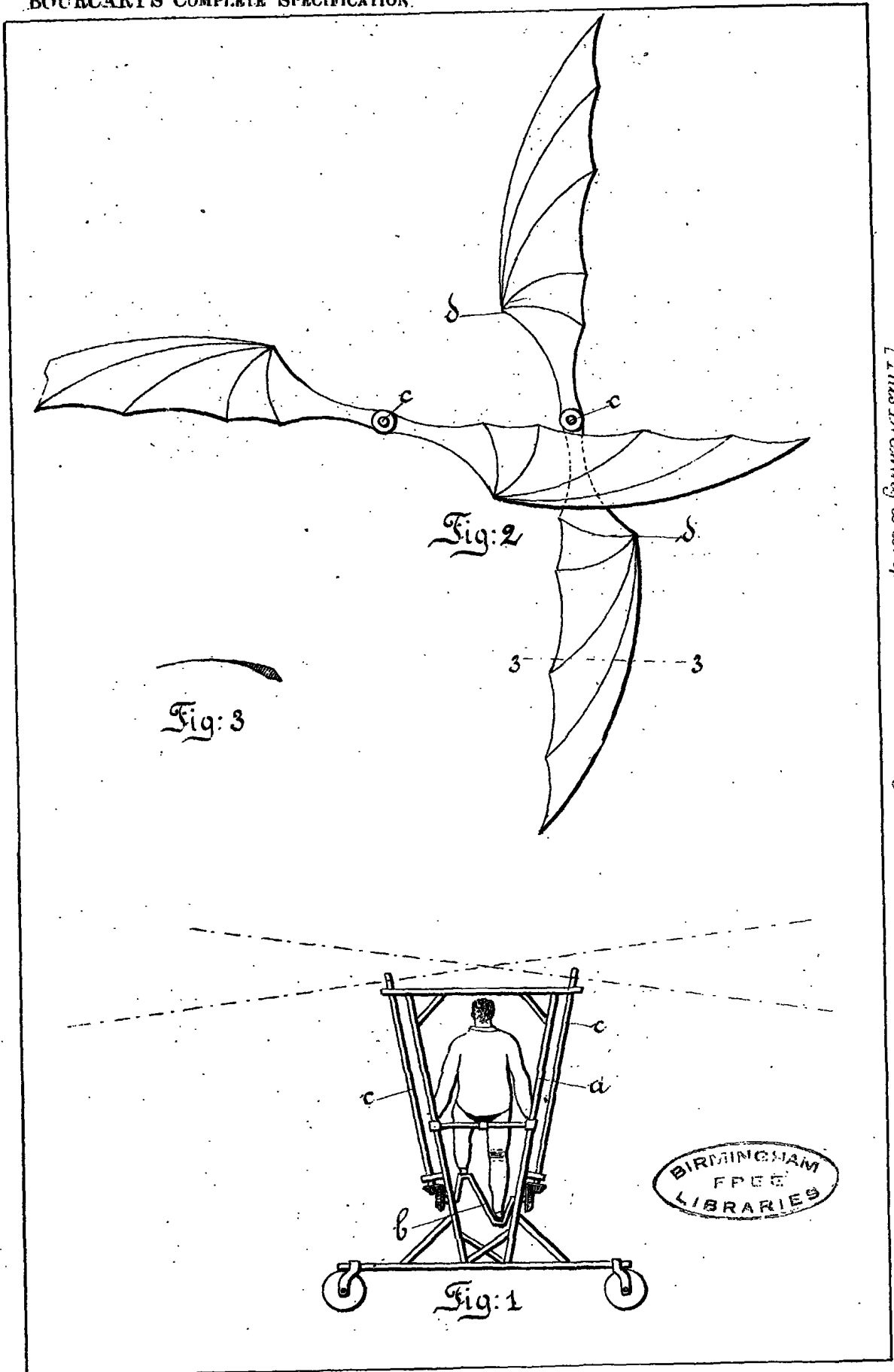
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