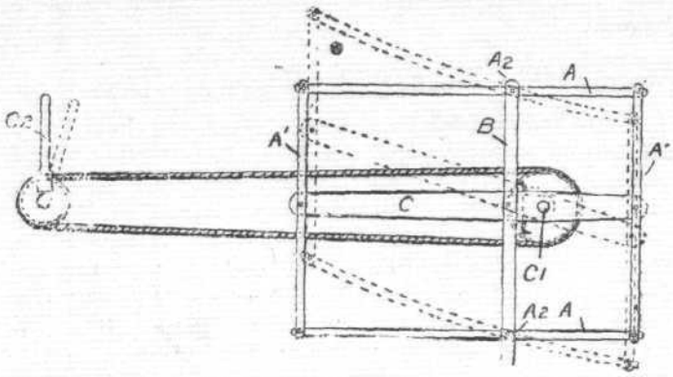
WRIGHT BROTHERS' NEW ELEVATOR.

THE Brothers Wright have had granted to them in America a patent for a new elevator, which was filed as an improvement on their patent of May 22nd, 1906. The idea embodied in the new invention is that of rendering the elevator more effective by causing its surface to automatically camber as it moves from its normal position. The accompanying drawing, reproduced from the specification, shows very clearly a method of putting the principle in practice.

The elevator illustrated is of the biplane type, having two simple flat surfaces, A, coupled together by hinged struts, A^1, and pivoted at A^2 to a rigid vertical frame, B. Fastened to the struts, A^1, is a longitudinal beam, C, which is pivoted about a centre, C^1, so that it can be swung into any position by suitable mechanism operated from the lever, C^2. The support for the pivot, C^1, is provided by the frame, B, but it will be noticed that its centre is not in the same plane as the pivots, A^2, which form the attachment of the elevator surfaces. Consequently, while the surfaces, A, remain perfectly flat in their normal horizontal position, they become cambered so soon as they are either tilted or dipped by the action of the operating mechanism. It will be noticed, moreover, that the surfaces are not pivoted midway between their front and rear edges, and consequently the inclination of the rear part of the frame is greater than that in front.



THE NEW WRIGHT ELEVATOR.—End elevation, showing the arrangement of the planes, A, and the operating mechanism, C, both of which are mounted on the frame, B. The dotted lines illustrate the cambering which results from the displacement of the pivot, C^1, from the pivots, A^2.

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CORRESPONDENCE.

*** *The name and address of the writer (not necessarily for publication)* MUST *in all cases accompany letters intended for insertion, or containing queries.*

THE NORTH POLE—AN APPEAL.

To the Editor of FLIGHT.

SIR,—I am writing with a hope that the great advance which has been made in aerial navigation during the last year will bring with it a reawakening of the spirit of Polar exploration. It is now, I think, generally conceded that the conquest of the air will furnish the true key to the mystery of the Poles.

Other nations are already considering aerial exploration schemes. Are we Britishers to sit calmly down and see the secret given to the world by Germany, France, Norway or the United States, or are we going to shake off our apathy and show the world that the old spirit of adventure and conquest which characterised the days of Elizabeth is not dead in the reign of Edward VII?

Is not the time ripe for the organization of a British expedition? My idea would be to go as far north as possible with a suitable ship and boats—by the Smith's Sound route for preference—and then to attempt the other four or six hundred miles by airship.

Since my return from the Arctic last year I have talked the matter over with many of the old Arctic explorers, as well as with a number of gentlemen who are interested in aerial navigation, and they are all of the opinion that if a little enthusiasm were aroused it would be easy to equip an expedition by popular subscription, thus making it in the widest and truest sense a national undertaking.

I shall be very pleased to have the views of any of your readers who are interested in the matter, especially with ideas as to a suitable form of airship.

England is the oldest suitor for the hand of the White Lady of the Pole, who is still waiting to be won. Let Greater Britain awake and show that, at any rate, she is in the fight with the other nations.

I am, Sir,
Yours, &c.,
SANDON PERKINS.

Ilfracombe.

THE FUTURE OF AERIAL LOCOMOTION.

To the Editor of FLIGHT.

SIR,—Will you kindly accord me the hospitality of your columns in order to advance one or two views which may prove beneficial to other students of aviation?

In the first place, in congratulating your foresight in publishing a journal within the range of the masses, I would suggest the publication of a series of articles explanatory of the science of flying, the laws of flights as exemplified in the animal kingdom, with a *résumé* of the more noteworthy types of machines embodying these fundamental laws. Such a series of articles would be welcomed by beginners in this new science, the details of present machines conveying little or nothing to a novice in the art.

I beg, moreover, to venture to disagree with your admirable leading article in your last issue in that part relating to the advisability of an inventor holding back anything he may possess in the nature of a master-patent which may be jeopardised by exhibition of same in public. There are some designs worked out by really clever *scientists* (I say scientists advisedly, not mere emulators of men with money, who repeat with precisely similar machines the pioneer efforts of others), advanced designs which place entirely in the shade the so-called "experimenters" of to-day. For instance, I may refer to the hélicoptère or "screw-flyer" type of machine. As we all know, from the days of Pancton up to Cornu, Bréquet, and Berliu of to-day, this branch of aviation enjoys merits over the aeroplane transcending those of the latter, *if* these experimentalists could only discover the secret of making the machine travel *forward* as well as upward. Ascent perpendicularly is easy; it is in attempts to propel that disaster by turning turtle occurs. One inquires, "Can this in practice be accomplished?" The answer is "Yes, and by the correct location of the centre of gravity."

I claim to have theoretically discovered this law, being the first Englishman to achieve this honour by subsequent experiment; but the prior claim must be conceded to Mons. P. L. Sénécal, a veteran French scientist twice my age, to whom I give priority with pleasure. This subject I have treated exhaustively in my paper, read at the Royal United Service Institution, entitled "Flying Ships of the Future," published in the *Aeronautical Journal* last year. Therein also, I showed that the mechanical winged machine is, too, a practical possibility, demonstrating the highly-advanced type particularly of another veteran reader of your journal, a Mr. Henry McKee, whom you have referred to in your other Journal, *Automotor*.

Therefore I would urge present-day students of aerodynamical science to study closely the principles and laws demonstrated by Nature in order to encompass the true subjugation of the air. A thorough knowledge alone will enable us to design fundamentally and construct a true flying airship. I hope to exhibit at Olympia models embodying the foregoing, and to assist other readers in your columns by more concise descriptions of these self-same teachings of birds, bats, and insects.

I am, Sir, yours faithfully,
EDGAR E. WILSON.

ENGINES FOR MODELS.

To the Editor of FLIGHT.

SIR,—In reply to the letter of Mr. Caton, in FLIGHT of January 30th, I beg to say that I am not disposed to give quite all the information asked for, as, subsequent to coming to London, I was two years in the country, and during this time I spent £600 and every minute of time from early morning till late at night working at the problem of flight. It is obvious, in view of this, and