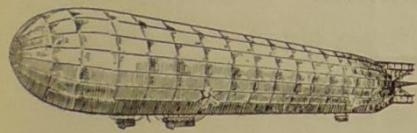


AERO AND HYDRO

Edited by E. PERCY NOEL

HOW POWERS ARE PREPARED FOR FIRST AERO WAR

THE first great war of the air is about to be fought in Europe, unless all the reports of hostilities have been ridiculously exaggerated. The supremacy of Europe, perhaps of the entire world, may be decided for many years to come before the conflict ends. In this the aeroplane and the dirigible will play spectacular parts. To say that, combined, they can swing victory into defeat, or defeat to victory, would probably not be to exaggerate. Yet the real value of aero equipment of the most complete and efficient kind available remains to be learned by actual service. Which nation's aerial force will prove the strongest can only be guessed.



GERMANY.

between these countries: France and Germany opposed, Russia opposed to Austria and Germany, with Serbia's small equipment on the defensive against Austria. If Great Britain is actually engaged in the war, her aerohydros, land machines and dirigibles will probably not cross the channel for land fighting.



FRANCE.

Numerically France and Russia combined are stronger aerially than Austria and Germany united. The great air battles will undoubtedly be between these countries: France and Germany opposed, Russia opposed to Austria and Germany, with Serbia's small equipment on the defensive against Austria. If Great Britain is actually engaged in the war, her aerohydros, land machines and dirigibles will probably not cross the channel for land fighting.



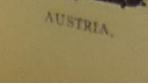
RUSSIA.

In the naval battles we may see the aerohydros of France and England united against the similar equipment of Germany and Austria with Russia's principal hydro equipment close to her own shores on coast defensive duty.

France is undoubtedly supreme as far as her numerical strength with land machines is concerned. She could, within a few months, add to her present quota of 745 land machines, 250 to 400 others and the pilots to man them. Russia's present equipment of 680 land machines could not be increased by privately owned planes, as aeroplane ownership in Russia is a government monopoly. Germany could add 200 machines and pilots to her total of 540 land machines, within a very short time; but little increase could be made in Austria's 130.



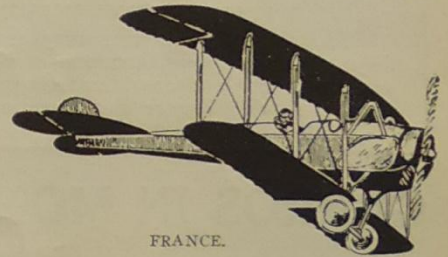
ITALY.



AUSTRIA.

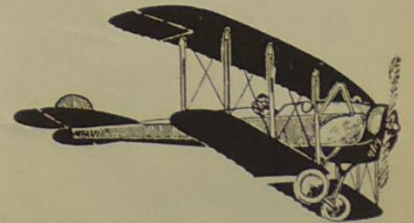
The total strength of France, Russia and Serbia combined, in land machines, is at pres-

ent 1,443. Germany's and Austria's total is less than one-half as great—670. It must be borne in mind that these figures include all flyable machines owned by the governments. Many of them are old rebuilt machines that were new from three to four years ago, but they are none the less serviceable for some purpose. There are more old machines in the French equipment than in any of the other countries, Russia's equipment being the newest.



FRANCE.

Germany's dirigible strength is the greatest and Austria's is very important. Ten Zeppelins were recently ordered by the latter country, but have not yet been delivered. Combined, the dirigible forces of Germany and Austria total at least 26. These include two Zeppelins in Austria and eight in Germany, varying in cubic-meter capacity from 17,700 to 22,000.



RUSSIA.

France has an excellent fleet of dirigibles, however, some of them are exceedingly fast and, besides holding the dirigible speed record, French military dirigibles hold the world's duration record—35 hours 19 minutes. This record was recently made by the 9,000-cubic meter L'Adjutant Vincenot, breaking the record of 34 hours 59 minutes previously held by a Zeppelin of 22,000 cubic meters capacity. But France lacks the weight-carrying dirigibles of Germany, having but one of the Zeppelin type—the Spiess. Russia is equally ill-equipped in that particular.



GERMANY.



ENGLAND.

The leading aviatic equipments of the European nations are shown by the accompanying comparative cuts, based, in the case of dirigibles, on total weight carrying ability; numerically in case of aeroplanes.



ITALY.

Comparative Strength of Europe's Aerial Equipment

Dirigibles		Aeroplanes		Aero- hydroplanes	Total
Germany	18	France	745	35	780
France	15	Russia	680	25	705
Russia	15	Germany	540	20	560
Italy	12	Great Britain	85	140	225
Austria	8	Italy	210	15	225
Great Britain	7	Austria	130	12	142
Belgium	4	China	43	6	49
Spain	3	Roumania	45	..	45
Japan	3	Greece	40	5	45
Turkey	2	Spain	36	7	43
United States	1	Belgium	39	2	41
Holland	1	Japan	24	8	32
Switzerland	..	United States	19	10	29
Sweden	..	Turkey	18	1	19
Servia	..	Servia	18	..	18
Greece	..	Sweden	5	10	15
Roumania	..	Norway	11	2	13
Denmark	..	Holland	11	1	12
China	..	Denmark	4	7	11
Bulgaria	..	Brazil	4	7	11
Chili	..	Bulgaria	8	..	8
Brazil	..	Chili	7	..	7
Mexico	..	Mexico (Const.)	6	..	6
Argentina	..	Argentina	6	..	6
Portugal	..	Portugal	4	..	4

The above figures were very carefully estimated from reports by AERO AND HYDRO correspondents dated as late as July 20, 1914. They show the numerical strength in the air of the various nations. Privately owned dirigibles and aeroplanes are not considered, because such machines would not be put into war commission at once. All of the powers, notably France and Germany, are extremely well provided with captive and free balloons and kites.

CARROS IN MONCO...