

Englishman and an Italian, while the united debt of individual citizens of Austria-Hungary, Germany, Russia, and Belgium only slightly exceeds that of an inhabitant of France.

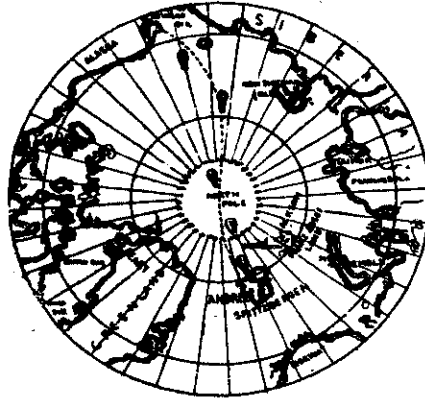
In the last set of figures, which take the form of circles, the amount of increase or decrease which the debts have undergone in the past five years is illustrated. The size of the larger circles shows the relative bulk of the debts of all the countries five years ago, while the smaller circles show the amount of increase during five years. The United Kingdom alone among the eight has contrived to decrease her indebtedness, and the amount of this decrease is shown by the white circle within her large one.

Only the Imperial debt in the case of Germany, and the federal debt in that of the United States are in this last set of illustrations taken into consideration.

ANDREE AND HIS BALLOON.

PROFESSOR ANDREE, who is director of the Patent Office of Stockholm, Sweden, has entertained for many years the idea now being put to a practical test. The suggestion of reaching the Pole in a balloon came from his observations of the regularity of the trade winds and a study of polar air currents. The distinctive feature of Andree's balloon is a strong guide rope, which serves two all essential purposes. First, it keeps the balloon at a uniform height and so insures that the supply of gas will not be diminished by expansion and underflow; second, it acts as a keel to the

airship, which is provided with three sails. By means of this keel the balloons can drift before the wind at an angle to the general direction. Professor Andree esti-



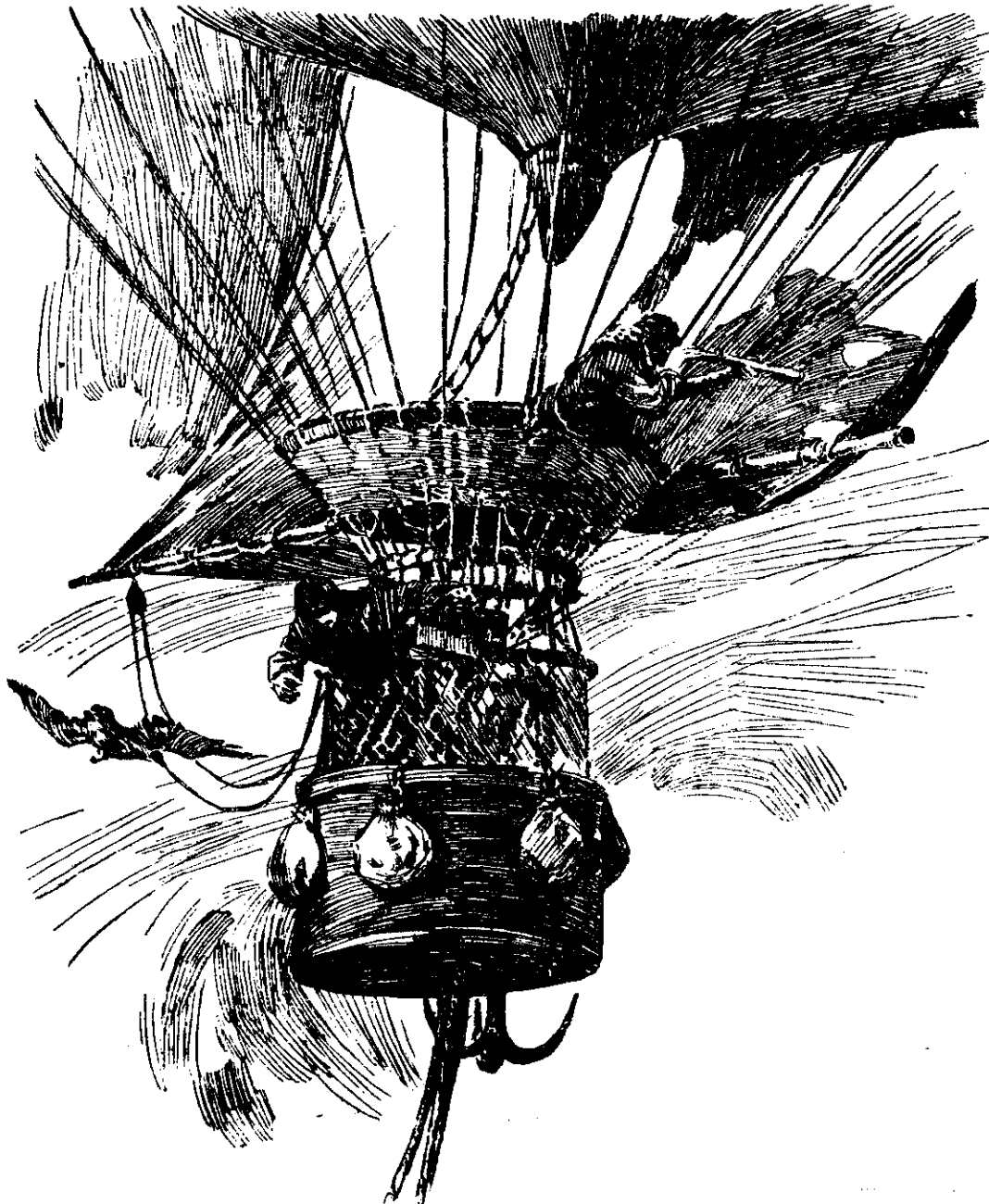
ANDREE'S JOURNEY TO THE POLE.

mates a speed of from twelve to fifteen miles an hour. At this rate the Pole would be reached in six days, a favourable and constant wind being the only necessity.

The balloon has a capacity of 170,000 cubic feet and is 67½ feet in diameter. Its basket, or car, is only seven feet in diameter and five feet in depth. Above this is the observatory. The car has room for one at a time and is the sleeping room. In the observatory are the sextants, glasses, and other instruments. The stove is suspended twenty-five feet below the car, and is for cooking only. Professor Andree is accompanied by a civil engineer, an army officer, a chemist, and a balloon expert.

The latest news of the daring aeronaut, who left Spitzbergen for the Pole last month, was in the shape of a pigeon-borne message stating that at the time of the despatch of the letter the balloon had passed the eighty-second degree of latitude, and was making good speed northwards. The bird was shot by the captain of the sealing vessel 'Alken' between the North Cape of Norway and the Seven Islands, off the coast of Lapland, near the entrance to the White Sea.

'Nothing new under the sun.' The principle of the tubular boiler has been discovered in the ruins of Pompeii, where a number of bronze domestic boilers have been found with tubes inside, as in our most elaborate marine boilers. The tubes are made of bronze foil, bent and brazed or soldered. Some of them are elegant in form, and may have been the 'samovars' or kettles of a Pompeian '5 o'clock.'



ANDREE AND HIS BALLOON.