

in the year unfit for taking observations of the enemy at altitudes.

Foreign armies are also becoming convinced of the necessity for extending the service of the air. It was last autumn that the French military authorities at Toul put the Lebaudy airship through a series of elaborate experiments, to test thoroughly its efficiency as a means of scouting and photographic survey. In its former capacity, a moving airship should excel the horizontally immovable captive balloon. For it can travel over a distant camp and fortress of the enemy, and discern its secrets. A Colonel in the French army, who ascended in the Lebaudy airship from Toul, was able to detect every detail of the fortress of St. Michael.

Amongst the experiments at Toul were also tests of the value of an airship for dropping explosives on the enemy, nor were its capabilities of rising to a considerable height to avoid the enemy's fire forgotten. In one test, as to altitude, the Lebaudy airship reached an altitude of 1,350 metres, and remained there one hour.

When the new aerial scout becomes a feature of warfare, efforts will undoubtedly be made to invent special guns for its destruction, but though ordinary artillery fire will be able to do damage when an airship is ascending or descending near the ground, the weapon that can successfully cope with it at considerable altitudes will not be easy to design.

Obituary.

THE LATE MR. STANLEY SPENCER.

We regret to record the death of Mr. Stanley Spencer, the well-known aéronaut, at Malta, from typhoid fever. Though his career as an aéronaut has been closed when still young, he lived long enough to win the reputation of being a dexterous and undaunted aéronaut. To him, indeed, hesitation and fear seemed unknown. His neatness of execution was strikingly exemplified in his numerous parachute descents, for carrying out which, he possessed an extraordinary aptitude. The parachute has been too frequently the cause of disaster and death in unskilful and untrained hands, but when manipulated by Mr. Stanley Spencer

it seemed to be divested of its dangerous qualities.

Mr. Stanley Spencer made numerous ascents in ordinary balloons, but he will, perhaps, be most remembered for his airship voyages. His inspired attempt to round the dome of St. Paul's Cathedral, will still be fresh in the minds of many Londoners. Success in that attempt was not achieved, but all who witnessed his efforts to perform a picturesque feat must have felt satisfied that had the proverbial British breeze blown with a little less force, his machine would have been as equal to the task as was that of M. Santos Dumont, when he rounded the Eiffel Tower.

Notes.

The Dirigible Airship Competition at the Milan Exhibition.

In the published regulations governing the competition of dirigible airships, at the Milan Exhibition, it is stated that the trial for this competition will consist in a trip without stoppages or refurnishments over the prescribed course. The prize will be awarded to the airship that will have gone over the course in the shortest time, provided it is under 45 minutes. The course is from Milan (Piazzia d'Armi) to Sesto S. Giovanni (Rondò), and back again. By the time taken, is meant the time employed by the airship to make the two trips going and returning, at full speed; thus, the time in starting the machine, in turning the machine at Sesto S. Giovanni, and the time necessary to stop machine past the return point, in Milan, will be deducted. The competitor will have to effect at least three competitive trials on three different days; he can make more if he wishes, up to a maximum of ten. From these trials the competitor himself must choose one for the classification.

M. Santos Dumont's Hélicoptère.

Though M. Santos Dumont has achieved no little success with his navigable balloons, he is evidently not an unbeliever in the heavier than air principle, for he is constructing an hélicoptère. In this arrangement, there are two horizontal screws for lifting a light bamboo frame-work, under which the aéronaut and his motor will be slung. There is a vertical guiding or pulling screw fixed to one leg of the frame-work, and a rudder to the other leg. The frame is 41 feet long. The motor, 24-horse power, weighs only 77 lbs., and the complete machine only 353 lbs.