## Switzerland from a Balloon.

By CHARLES HERBERT.



ROSSING the Alps by Balloon" does not appeal so strongly to the imagination of the reader as trips to the North Pole or Klondike, and yet a great deal of

interest and romance attaches to such a

project.

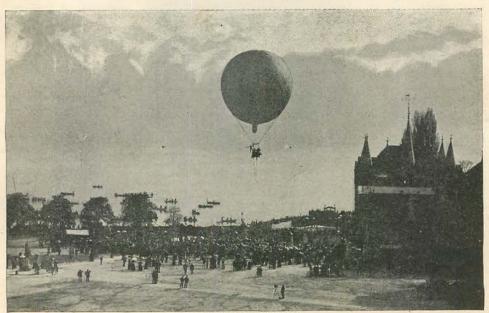
During the late autumn of last year Captain Edward Spelterini, who has made over 500 balloon ascents, determined to make an attempt to cross the high Alps of Switzerland in a balloon, a feat which no air-ship had ever before then accomplished. He had many reasons for wishing to undertake this voyage in the upper regions over the most magnificent scenery in Europe. - Himself keenly interested in meteorological and physical questions, he had succeeded in enlisting the sympathy of the Weather Bureau of Switzerland, and also of many Swiss scientific men of high standing. It was his intention to make a number of experiments and observations on the physical conditions of the upper atmosphere, and to take a large series of photographs of the country over which he would travel. The point of view from which these photographs should be taken in order to be of the greatest use for cartography, geography, and geology, was carefully planned,

and attempts were to be made to employ the science of photography in the study of the formation of vapour and clouds in high Alpine altitudes.

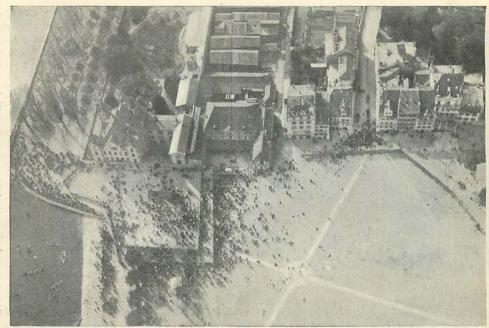
It was on October 3rd that Captain Spelterini, after waiting some days, made his ascent from Sion, in Canton Valais. The "Vega" passed over Montreux and Yverdon; then, crossing the Jura, it went towards Pontarlier at a height of 2,500 mètres. It eventually descended without mishap at Pratoy, between Langres and Dijon, in the Côte d'Or.

The photographs of mountain scenery taken during this balloon trip over the Alps are of extraordinary interest and beauty, and are the only ones of the kind in existence, for no one else has ever photographed the mountains of Switzerland from a balloon before. They give us aspects of the rugged Alps such as no photographer or painter could obtain in the ordinary way. The cloud and snow effects are of great beauty, and the mountains, which we thought we knew so well, reveal themselves in a wonderfully novel and beautiful manner.

Captain Spelterini's photographs open up, in fine, a new field for the lover of Nature, and many disciples of this art will probably arise. There is a great deal of work to be



I .- THE ASCENT AT VEVEY.



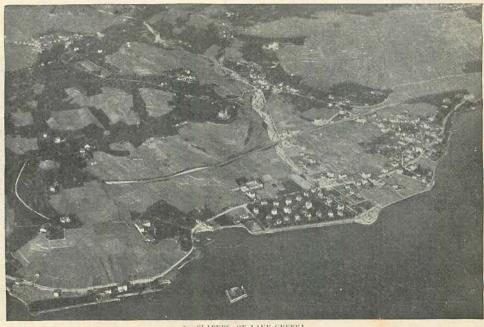
2. THE MARKET-PLACE, VEVEY-FROM THE BALLOON.

done in the way of balloon photography, but the process is not by any means so easy as it looks, and one must be prepared for repeated failures.

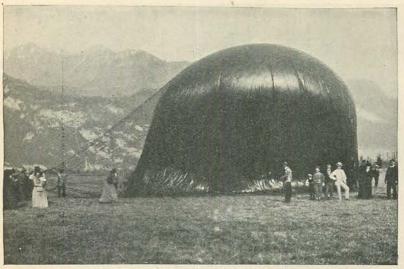
Captain Spelterini has written an account of the voyage of the "Vega" over the Alps,

and this, together with the photographs taken on the occasion, will appear in an early number of The Strand Magazine.

The trip has everywhere aroused the greatest interest, and the German Emperor, doubtless with an eye to the employment of



3.-CLARENS, ON LAKE GENEVA.



4 .- DESCENT IN THE VALLEY OF THE RHONE.

balloon photography in warfare, commanded Captain Spelterini to take his balloon and photographic apparatus to Wiesbaden, and to make an ascent before him there.

The photographs Nos. 1, 2, 3, and 4 were taken by Captain Spelterini during a special ascent which he made from Vevey, on the Lake of Geneva.

In No. 1 the balloon is leaving Vevey on a lovely summer morning, and a large concourse of spectators have assembled in the

Place du Marché to witness its departure, for Captain Spelterini has a great name as an aeronaut, and has made more trips in Switzerland than anyone else. One of the occupants of the car is waving adieu, and his position looks extremely precarious. In the foreground is a photographer with his camera set up on its legs waiting for a favourable moment to "press the button."

No. 2 is a photograph taken from the balloon, which has now risen to some little height must have been is evident from the shadow cast by each individual and every object. The boats on the lake remind one of nothing so much as the little water skaters which

above Vevey. We are looking down on the Placedu Marché, where the spectators look like little ants and the buildings like children's toys. How bright the sun

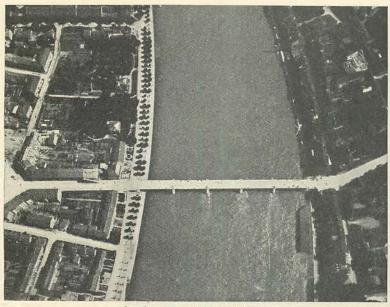
skim to and fro over the surface of a pond.

No. 3 was taken while the balloon was over Clarens, on the Lake of Geneva, the beautiful village three and a half miles from Vevey, immortalized by Rousseau. The villas and chateaux standing in their own grounds present a curious appearance.

The last picture (No. 4) taken during the Vevey ascent shows the balloon at the finish of the journey in the Valley of the Rhone. Captain Spelterini may be seen standing on



5.-BÂLE.



6.—BÂLE—THE JOHANNITER BRIDGE.

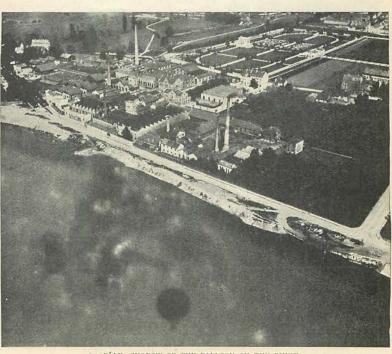
the right of the balloon. He wears a peaked cap, and his features are illuminated by a broad smile; so he had evidently effected a safe and satisfactory landing.

Nos. 5, 6, 7, and 8 were all taken at one time or another by Captain Spelterini

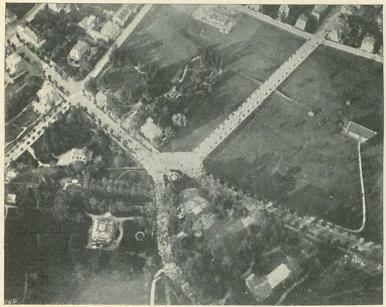
while ballooning over Bâle, that great Swiss centre, the "Clapham Junction" of Switzerland, so well known to travellers on the Continent. No. 5 is a very pretty picture, and gives a bird's-eye view of the town and the three bridges. In the foreground is the five - arched "Johanniter Brücke," com-pleted in 1882; the centre one is the wooden "Alte Brücke," 165vds. in length, 16yds. in breadth, and partly supported by stone piers; it was originally built in 1225. In

the middle of the bridge rises a chapel of the sixteenth century, and a column with a barometer and weathercock. Above this old bridge the river is crossed by the iron "Wettstein Brücke," completed in 1879 with three spans 200ft. in width. In No. 6 we are looking right down on to the Johanneter Bridge, and on the people walking over it, who look like tiny insects. The swirl of the Rhine around the arches comes out

very prettily; this photograph was taken in brilliant sunshine, and is a very clever example of balloon photography. No. 7 is curious, for the photographer has managed to get a picture showing the shadow of the balloon on the Rhine. The view was



7 .- BÂLE-SHADOW OF THE BALLOON ON THE RHINE.



8.—NEAR BÂLE—OVER THE MONUMENT OF ST. JACOB.

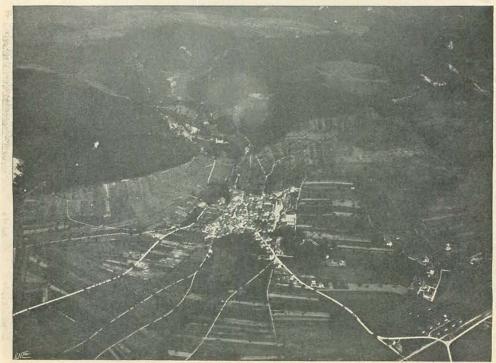
taken while over the outskirts of Bâle. No. 8 was taken while the balloon was above the monument of St. Jacob to the southeast of Bâle. This monument, completed in 1872, commemorates the heroism and death

of 1,300 confederates who opposed the Armagnac invaders under the Dauphin (afterwards Louis XI.) in 1444.

No. 9 was taken while the balloon was over Arleshêim, a little hamlet near Bâle: the white roads spreading out in all directions from the village are plainly visible.

No. 10 is Winterthur, on the Euläch, a wealthy and industrial town and an important railway junction. From this photograph we get an idea of the breadth of the principal

streets. Winterthur lies to the north-east of Zurich. No. 11 was taken by Captain Spelterini while above St. Gall, one of the highest lying of the larger towns of Europe: it is situated a few miles south of Lake



9.—ARLESHÊIM.



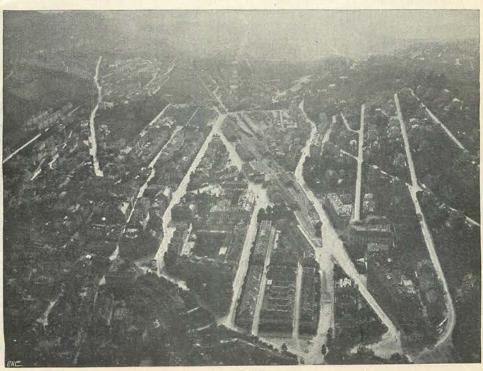
10. -WINTERTHUR.

Constance. St. Gall is one of the chief industrial towns of Switzerland, embroidered cotton goods being its staple product. The broad roads in this photograph look almost

like rivers, and we might imagine we were looking down on a Venice. No. 12 shows the ancient and thriving town of Bienne, on the Lake of Bienne, some thirty miles south of Bâle. The view from Bienne is en-hanced in clear weather by the magnificent chain of the Bernese Alps. Nos. 13 and 14 represent Zurich, the beautiful Swiss town which will be well known to most readers. In

No. 14 we get a view of the lake, whose beauty and charm are scarcely equalled by that of any other Swiss lake.

We have already alluded to the fact that



11.-ST. GALL.



12. -BIENNE.

Captain Spelterini takes a keen interest in scientific matters. During his balloon ascents he frequently makes observations with the meteorological and physical instruments which he carries with him, and the results of his investigations in the upper regions of the atmosphere are greatly valued by the Swiss Weather Bureau and the *savants* of Switzerland and Germany.

"Air travels," writes Captain Spelterini, "have excited at all times the greatest interest among all classes of the population, and do so even to-day, when a balloon trip is no more considered a rare event. The landing of a balloon, whether it takes place in the neighbourhood of a large town or in the open country, is always an interesting occurrence. Young and old come rushing from all sides, and are ready to lend a helping hand in assisting the aeronaut to pack up his balloon. Every day many people express the wish to be able to travel through the



13.-ZURICH.



14. - ZURICH-SHOWING THE LAKE.

air in a balloon and to obtain a bird's-eye view of the earth; few, however, are able to realize this wish. By photographs, however, it is possible to give an idea to anyone outside who cannot enjoy this sport how the earth looks from a bird's-eye view. It is true that such photographs are comparatively rare and difficult to obtain. The attempt of a well-known Berlin artistic establishment to obtain such photographs of large towns, etc., from balloons for their periodical failed from the beginning.

"The difficulties in taking such photographs are very great; a great deal of practice is required, and many failures will occur before something good is produced. I may mention that the reproduction of such photographs by blocks is defective, and cannot be compared with the picture observed on the negative plate through the lens.

"The endeavour to obtain photographs from balloons is as old as photography itself. It is only recently, however, that pictures of any value have been obtained; it was especially the invention of the dry plates and the improvements inconnection therewith which contributed in developing balloon photography.

"In most cases it is only possible to take instantaneous photographs, as even a captive balloon is nearly always in motion. Although

the instantaneous shutter may act with the greatest possible speed, it is important also in instantaneous photography that the apparatus should be as nearly as possible in a state of repose at the moment that the photograph is being taken, namely, during the time of exposure. In consequence the camera is either let into the bottom of the car, or, if one wishes to economize space in the car, fixed to the outside of the latter by means of strong universal joints, which make it possible to focus the camera in all direc-The use of a hand camera is of great advantage to an experienced aeronaut-photographer, as it can be easily moved. The steadier the observer holds the apparatus the better of course the photographs will come out. As regards the camera itself, a firm connection of the board holding the lens with the back part is best. Cameras with bellows in the balloon are too easily damaged. As regards shutters, the Anschutz shutters offer the greatest advantages. With these not only can the time of exposure be best regulated, but they have also this in their favour, that the single portions of the sensitive film of the plate are lighted successively, whereby the shaking of the balloon cannot exercise such a disturbing influence upon the clearness of the photo."