we have the survival of some pagan or possibly prehistoric day of augury, which has sheltered itself and preserved its vitality under the protection of an ecclesiastical saint. This view is supported by the fact adduced in *Notes and Queries* (1st ser., xii. p. 137) that in France St Médard (June 8) and St Gervase and St Protais (June 19) are accredited with an influence on the weather almost identical with that attributed to St Swithun in England. Mr Parker pro­fesses to detect a shower of rain as the symbol of St Swithun in the clog almanacs (of Queen Elizabeth’s time), but Mr Earle doubts the resemblance. Of other stories connected with St Swithun the two most famous are those of the Winchester egg- woman and Queen Emma’s ordeal. The former is be found in Gotzelin’s life (c. 1100), the latter in Rudborne’s *Historia Major*

(15th century),—a work which is also responsible for the not improbable legend that this prelate accompanied Alfred on his visit to Rome in 856.

The so-called lives of St Swithun written by Wulstan, Lantfred, and perhaps others towards the end of the 10th century may be found in Bollandus’s *Acta Sanctorum* (July), i. 321-327 ; Mabillon’s *Acta SS. o. B.,* vi. 70, &c., vii. 628, &c. ; and Earle’s *Life and Times of St Swithun,* 59, &c. See also william of Malmesbury, *Gest. Reg.,* i. 150, and *De Gest. Pont.,*160*,* 167, 179; Florence of Worcester, i. 168 ; Rudborne ap. wharton’s *Anglia Sacra,* i. 287 ; Hardy's *Cat. of MSS.,* i. 513-17; Brand's *Popular Antiquities',* Chambers’s *Book of Days.* Ethelwulf’s *Tithe Charters,* nearly all of which refer to St Swithun in the body of the text, may be studied in Haddon and Stubbs’s *Councils,* iii. 636-45 ; a com­parison of the charter on page 642 with Gotzelin’s life (ap. Earle, 69) and william of Malmesbury *(Gest. Reg.,* 150 ; *De Gest. Pont.,* 160) seems to show that these charters, even if forgeries, date back at least to the 11th century, as well as the story of his being Ethelwulf’s “ altor et ductor.”

SWITZERLAND

Part I.—Geography and Statistics.

As the Swiss Confederation consists of a number of small districts, differing from each other in many points, but gathered round a common centre, originally for common defence against a common foe, it is not surprising that its political boundaries do not coincide with those of nature. So we find that Ticino is south of the main chain of the Alps, a large part of the Grisons is east of the Rhine and of the ranges separating it from Tyrol, while Schaffhausen is north of the Rhine, and Porrentruy is in the French

plain far down the western slope of the Jura. Putting aside these exceptional cases (all of them outside the ori­ginal limits of the Confederation), the physical geography of Switzerland may be thus roughly summed up :—

(1) To the south there is the main chain of the Alps, which is joined at Mont Dolent (12,566 feet) by the lower ranges running east from the east end of the Lake of Geneva, and which continues to be the boundary up to the Stelvio Pass.

(2) To the north of this main chain of the Alps there is another great range, only slightly inferior in height and extent, which starts from the hills known as the Mont Jorat above Lausanne, rises in the great peaks of the Bernese Oberland and in the Tödi, trends to the north near Chur, and, after rising once more to form the Santis, dies away on the south shore of the Lake of Constance.

(3) The main chain of the Alps and this great north outlier are parallel to each other from Mont Dolent to near Chur; joined for a short space near the Pizzo Rotondo (west of the St Gotthard), they again part near the Oberalp Pass (east of the St Gotthard). Between these two great ranges flow two of the mightiest European rivers, the Rhine towards the east and the Rhone towards the west, their head waters being separated only by the tangled mountain mass between the Pizzo Rotondo and the Oberalp Pass.

(4) To the north of the great north outlier of the main chain of the Alps there arc what may be called the plains of Switzerland, really the huge undulating valley of the Aar (and its affluents), to which must be added the Thur valley between the Aar basin and the Lake of Constance.

Thus, omitting the special cases named above, we may roughly describe Switzerland as consisting of two great trenches traversed by two great rivers, and enclosed by two huge mountain masses, together with the enormous valley of the Aar and the smaller one of the Thur, both these shut in by the great north outlier of the main chain of the Alps, the Rhine, and the Jura,—two deeply cut trenches, and two wide and undulating valleys.

The main chain of the Alps rises in Swiss territory to the height of 15,217 feet in Monte Rosa, and its north outlier to 14,026 feet in the Finsteraarhorn. The mean level of the Aar valley has been estimated at 1378 feet, its lowest point being the low-water mark of the Rhine at Basel (914 feet); the lowest level within the Confedera­tion, however, is on the Lago Maggiore (646 feet).

According to the most recent calculations, the total area of the Confederation is 15,964·2 square miles, of which 71·7 per cent., or 11,443·3 square miles, are classed as “ productive,” 3032 square miles being covered by forests, and 132·3 square miles by vines. Of the other 28·3 per cent., or 4520·9 square miles (classed as “ unproductive ”),

709∙9 are occupied by glaciers, 520·3 by lakes, 90 by beds of rivers and streams, and 62·4 by towns, villages, and buildings. Of the whole area the three great cantons of the Grisons, Bern, and Valais take up 7439·9 square miles, or nearly one-half, while, if to them be added Vaud, Ticino, and St Gall, the extent is raised to 10,552 square miles, or about two-thirds of the entire Confederation.

The total area of Switzerland (15,964·2 square miles) is distributed over four great river basins (draining to three different seas) in the following proportions :—Rhine 11,166; Rhone, 2717 ; Po, 1358; and Inn, 721.

The *Rhine* basin is by far the largest in Switzerland, and drains of course to the North Sea. The Rhine itself is formed of two branches,—Vorder Rhine (valley of Dissentis) and Hinter Rhine (from the Splugen and St Bernardino),—which unite at Reichenau, near Chur. The joint stream receives several mountain torrents, expands into the Lake of Constance, and then turns west, receiv­ing the Thur, and opposite Waldshut the great stream of the Aar, finally leaving Swiss territory at Basel, where it turns north. Its main affluent is the Aar, the basin of which covers no less than 6794 square miles. This stream rises in the glaciers of the Ber­nese Oberland, expands into the Lakes of Brienz and of Thun, receives from the left the Kander, the Saane, and the Zihl, and from the right the Emme, as well as (near Brugg, that great meeting-place of the waters) the Reuss flowing through the Lake of Lucerne and the united stream of the Linth and the Limmat flowing through the Lakes of Wallenstadt and Zurich. It is interesting historically to note the fact that the. thirteen cantons which till 1798 formed the Confederation are all comprised in the Rhine basin, the ten oldest *(i.e.,* all before 1500) being within that of the Aar, and that it was only after 1798 that certain Romansch-, French-, and. Italian-speaking “allies” and subject lands—with their respective river basins—were tacked on. The *Rhone* rises in the glacier of the same name and flows west, receiving the mountain torrents of the Visp, the Lonza, and the Dranse, besides others, expands into the Lake of Geneva, and a little way from Geneva quits Swiss terri­tory on its way to the Mediterranean. The main stream flowing from Switzerland to the *Po* basin is the Ticino (from the St Gotthard), which widens into the Lago Maggiore ; another stream expands into the Lake of Lugano; and others run into the Lake of Como,—all finally joining the Po in the Lombard plains, thus draining to the Adriatic. The Ramm, flowing through the Münster­thal, joins the Adige and so drains into the Adriatic. The *Inn* basin is composed of the upper part of the river (above Martinsbruck) and drains into the Danube and so into the Black Sea.

Most of the great Swiss rivers, being in their origin mere moun­tain torrents, tend to overflow their banks, and hence much is required and has been done to prevent this by embanking them, and regaining arable land from them. So the Rhine (between Ragatz and the Lake of Constance), the Rhone, the Aar, the Reuss; and in particular we may mention the great work on the Linth (1807 to 1822) carried out by J. Konrad Escher, who earned by his success the surname of “ Von der Linth,” and on the Zihl near the Lakes of Neuchâtel and Bienne, while the diversion of the Kander from its junction with the Aar at Uetendorf to a channel by which it flows into the Lake of Thun was effected as early as 1714.@@1

There are very many lakes in Switzerland. The two largest (Geneva and Constance) balance each other at the soutli-west and north-east comers of the Confederation. The following list gives details regarding the fifteen over 4 square miles in extent. It will be noticed that of these twelve are in the Rhine basin (eleven of

@@@1 The hydrographic bureau of Switzerland publishes annually a series of graphic tables representing the seasonal changes in the volume of all the im­portant rivers.