

will be an outlook over the walls of the Rhone valley, toward the Oberaarhorn with its great glacier. Perhaps we can make out the Finsteraarhorn, too, where it stands farther over to the west.

***47. Grimsel Pass, Oberaarhorn and Finsteraarhorn,
west from the Furka Pass***

There was a path over this very pass in the old Roman days, but it was not until after the advent of missionary enterprise that anything like a permanent inn was built for the shelter of travellers. The mountains were as grand as they are now, but they are cheerless neighbors on a stormy night. The old monks were very practical Christians when they came here to act as pathfinders, engineers and guides for the body as well as for the soul!

It is like standing on a high shelf, looking down to the world's floor and across to another shelf beyond the lowlands. You recognize the Oberaarhorn yonder, with the glacier basin beside it, and the Finsteraarhorn peering over the glacier from the western side? The Jungfrau is still further away in the direction in which we are looking, beyond the Finsteraarhorn. At the left of the Finsteraarhorn is the Rothhorn, with the Fiescher and Münster glaciers for companions, and away out at the right, as far as we can see, we catch a glimpse of one of the spurs of the Lauteraarhorn.

The crooked road over yonder, flattening itself against

the mountain-side, leads from the Grimsel Pass. (See the road as marked on the map.) They say the Grimsel region used, long ago, to be fertile and smiling with woods and pastures, but the Wandering Jew once plodded drearily up over that road and desolation came following on his heels. Certainly "the bricks are alive to this day" to testify to it, for the Pass is in a region where the face of the earth looks hard and forbidding enough. Just now, when the road is lighted by noonday sunshine, its severity is softened just a little; but fancy travelling up over those toilsome windings when the snow is twenty-five feet deep and one has to turn out every now and then for a mass of rocks and ice brought down by an avalanche a few days before! Some of those oblique scratches on the mountain slopes this side of the road are really huge gullies torn out by avalanches in other years.

When we hear of a village overwhelmed by the descent of a mass of snow or rocks and earth, it always seems like a calamity coming from heaven with a special intention of punishment or discipline; but when we see how these slopes lie, we realize that the terror-bringing avalanches are only magnified forms of such happenings as are commonplace in our own home experience. The loosening and falling of gravel from the upper end of a bank beside a road or a railroad track,—that is an earth avalanche on a small scale. The sliding of snow from a piazza roof as it thaws on a sunny, clearing-off morning,—that is an infant snow avalanche. It is all a question of relative proportions. Here we are to the mountain heights what

ants and crickets are to the height of our own south piazza!

On the road up here the snow-drifts linger till June, melting away gradually under the warmer skies and sending their waters down into that valley to add to the Rhone. Beyond the Grimsel Pass, after that road begins to go down hill on the other side of the mountain yonder, the melting snows drain off into the Aare. The famous gorge of the Aare which we saw near Meiringen, is less than twenty miles from here in an air line. Over behind us the Reuss begins and carries its own share of waters down to Lake Lucerne. Off at our left there are slopes that feed streams running down to Lake Maggiore and on through the loveliest part of northern Italy. "Three drops of rain, delivered from one drifting cloud, might fall into the Rhone, the Toccia and the Rhine, and, after filtering through Lake Lemman, Lake Maggiore and Lake Constance, might run forward on their several ways, into the sea, past Avignon, Cremona and Cologne." *

Streams of water run fast; streams of ice move slowly. But it was over on that glacier that we see at the extreme right, this side of the Oberaarhorn, that Agassiz and Hugi made the first systematic measurements of glacier movement. In 1827 record was made of the exact location of a certain hut on the ice, with reference to fixed spots on the mountain walls. Nine years later,—in 1836,—the hut showed that it had been carried along 2,184 feet.

* W. H. Dixon, *The Switzers*.

Three years later it had moved even farther, making 2,216 feet the extent of its journey. In 1840 it had advanced still another hundred feet. In 1884 the hut had travelled a mile and three-quarters since the date of the first measurement. The yearly average between 1827 and 1884 was a little over 220 feet. They say the Mer de Glace, over near Mont Blanc, moves even faster,—at the rate of almost two feet daily.

Let us consult that indispensable map again. We found before that there were four lines branching from the Furka Pass toward the west and southwest. Now we are to look over the country lying between the lower line and the second line from it, each having the number 48 at its end on the lower map margin. It is evident that we are to look beyond the territory shown on this map, No. 5. If we look at the general map of Switzerland again, Map No. 1, we find these two lines from the Furka Pass extend fully fifty miles toward the southwest to the great Monte Rosa group. We are then to turn around to the left, on the very spot where we have been standing, and look straight down the long valley of the Rhone, and beyond a full third of the distance across the whole country.

48. Magnificent View of Rhone Valley with Weiss-horn and the Monte Rosa Group fifty miles away

The Weisshorn, or white peak, explains its own name by standing up there on the horizon in the centre of our range of vision like a huge temple-roof above the hazy