

Trondhjem shows vaster perspectives and drearier reaches of sight; but still possesses its measure of the wondrous versatility of Hardanger, while it seldom provides the tender valley views. Geiranger is a maze of lovely vales and glens, of cataracts above the clouds, of precipices, cliffs and towering crags, of hamlets upon mountains with mountains above these, and of waterfalls, highest, slenderest, fiercest and most filmy in all the world, and so great in number that they are still unnamed and uncounted.

The Sogne fiord cannot but be regarded as the most stupendous and often appalling continuous spectacle so far accessible to the traveler in any part of the habitable globe. It is practically a sea water-way of more than one hundred miles in length, and with branches and ramifications of twice that distance split through almost solid mountain walls from 4,000 to 6,000 feet in height. Its waters are the deepest of all the Norwegian fiords, while the shores afford infrequent anchorage. If by any means the water-bed of the Sogne fiord could become dry, tourists could in many places look upon almost perpendicular rocks from 8,000 to 10,000 feet above their heads. Few valleys open upon the Sogne; but tremendous chasms are constantly appearing. The peasantry here huddle in almost inaccessible places, long distances apart; and moved to and fro between their tiny hamlets in boats built with rude sleeping accommodations. At various places you will see bits of shelving rock to which their boats are tied at night. Near these are tiny caves or rock fissures used as huts and as kitchens in these trips of overnight duration.

The scenery grows more grand and imposing as you proceed up the fiord, reaching perhaps its most sombre sublimity in the Naero Fiord, one of its branches. Another arm is the Fjaerland Fiord, near which are the vastest snow caves and ice-fields of Norway and the romantic village of Balholmen, scene of Frithof's Saga where Birch trees covered the mountain tops; on the sunny hill slopes

Ripened the golden barley, and rye waved taller than giants;—and from its extreme eastern branch, the Ardals Fiord, the third great waterfall of western Norway, the mighty Vettflos is reached; while through every opening to the North are seen the gigantic masses of the Jostedal glacier, the largest in Europe and covering an area of five hundred square miles.

In the amazing multiplicity of these scenes of beauty and grandeur there is one that will remain fadeless in the traveler's memory. It is that one when in the darkless night of these northern latitudes as your steamer creeps along down there in the almost blackened and abyssal silence between these parted mountain walls you look through their rifts towards heaven, and, knowing the night time hour, are given an indefinable hint, in the splendor of the light still lingering tenderly upon mighty mountain peaks, of that promised region of endless Morning Lands.

EDGAR L. WAKEMAN.

Threshing and potato digging are almost completed says the Rexburg (Idaho) Press. The outcome will not prove as favorable as could be desired, yet the raisers will be amply supplied for winter consumption.

SUGAR MAKING AT LEHI.

The announcement comes that many of the farmers of Utah county contemplate doubling their acreage of beets next season, and that a considerable number who have not engaged in beet culture heretofore have joined in the procession for the coming year. The factory is proving a great thing for Utah generally in keeping at home a large sum of money and reducing the price of sugar to a minimum, and is especially beneficial to Utah county in starting out in that section the commercial life-blood.

In view of the promised increase of beet production for 1894, it may be well to note a few items, additional to those already published, regarding the factory's work the present season. The picture at the mill is a most interesting one. Railway trains and an almost constant stream of wagons are still bringing sugar beets to the factory. Over one hundred railway cars stand unloaded on the grounds, sheds are crowded and workmen are piling beets out of doors and preparing to cover them.

The beet yard at the factory consists of five sheds 500 feet long by 30 feet wide, in which are beets 10 feet deep—enough beets to cover one of our city ten-acre blocks all over to a depth of five feet. The arrangement of the sheds is very convenient, the opening being on top. The beets pass over a screen, which will not admit any but the smallest particles. In the bottom of the sheds the floor on either side slants to the center, where a stream of water flows rapidly to the factory. There are four men employed shoveling beets into the stream, which conveys them to the washing machines of the factory. As they pass under the wall they are taken up by a large water wheel, which drops them in a chute and conveys them to the washing trough. There the stirring machine keeps the beets in constant motion until they are washed clean. They are next conveyed in a traveling chute to the cutter, where they are cut into small strips near the size and shape of a lead pencil. From there they pass down into the press, where all the juice is separated from the pulp, which is conveyed to horse cars, and dumped in the pulp sheds.

The pulp sheds are 800 feet long, 24 feet wide and 10 feet deep. These sheds are ougot fashion, the shed roof being on the surface of the ground. Eight thousand tons already have been unloaded and it is expected that 7000 more will be dumped. This refuse is valuable for cattle feed. Already there are being fed at the factory 250 head and there are expectations of fattening a great many more. There is enough pulp laid away in salt toatten 4000 head of cattle. It is sold at from 75 cents to \$1 per ton, and a great many farmers are using it. The creamery near by is feeding several tons a day.

The beet juice passes through several cleansing processes and is finally reduced to syrup by boiling. When sufficiently reduced it is drawn into the centrifugals, or strainers. These machines appear in similar form to the wringers of a laundry or the separator of a creamery, and revolve at a rate of 1500

revolutions a minute. They hold from two to four hundred pounds. The outside is porous and by the rapid movement the syrup is thrown through, leaving the grains clinging to the inside of the vessel. While in motion the material is blued and steamed until, when it is ready to be removed, it is white as snow. Being loosened, it falls to the center and is conveyed to the drying drum. After it leaves this, the granulated sugar falls down two chutes and is sacked ready for market.

Each sack has on it in addition to the company's mark, the number of each sack in the order to which it is filled. Yesterday, Friday, noon saw the sack marked 20485, making 2,046,500 pounds of the finest sugar in the world—an average of 333 sacks a day since the factory started its run this year.

There are 130 hands employed for the 100 days' run and twelve experts the year round. The factory is now receiving about fifty cars of beets each day as well as a constant supply by wagon. There had been 25,000 tons unloaded up to last evening, and 15,000 tons worked up. It takes 55 cars of coal a day to keep the twenty furnaces hot. The freight expense alone on coal and beets is not less than \$1200 a day.

The farmer receives \$5 a ton for the beets delivered at the factory, and by the time they are stowed away there cost the company at least \$5.50 a ton. Beets, in order to be successfully worked up, should go 11 per cent sugar with 80 per cent purity, but some run so far below this that they have to be rejected. The average taken in have from nine to eleven per cent of sugar and seventy-eight purity.

Out of 25,000 tons received there have been 2500 tons—or from one to four cars a day—condemned, at a heavy loss to the company. The contracts require the company to pay \$5 a ton, and when beets are tested and rejected because there is no sugar, the farmer hauls them back home. He has received his \$5 a ton, but only returns \$2 of it, the company losing the rest.

Beets raised on the company's farm run 8 per cent better than those grown in other places. This is the result of more skilful culture. The Utah Sugar company is paying considerable for the education of the farmers in beet raising. Around Lehi the people raise an average of 15 tons to the acre; these are of a good quality. Farmers raising sugar beets are required to open a correspondence with the management of the factory to obtain the benefit of their experience, and avoid raising unprofitable stock. It is estimated that there is 120 pounds of refined sugar to one ton of beets—less than seven per cent.

J. B. Brown of the firm of Colter & Brown, Fort Logan, (Colo.) saloon-keeper, committed suicide the other night by shooting himself in the head. The deceased was formerly a soldier at the fort, but upon his discharge went into the liquor business, and latterly has been his own best customer. Arousing from the lethargy resulting from a prolonged debauch, he loaded a 38-caliber revolver, retired to a room behind the bar and blew out his brains. The ball entered his head just above the right temple, killing him instantly.