

SWISS CHEESEMAKING.

Interview With a Graduate of a Dairy School in Switzerland.

In the San Francisco Chronicle Mr. Ulysse Greidoux, a graduate of one of the government dairy schools in Switzerland, tells why the cheeses of that country are so famous and so much superior to those of some other countries, the United States, for instance. He says:

"What causes the holes in the Gruyere cheese? They are produced during the process of fermentation, while the cheese is in the press. These holes should not be larger than the tip of a child's little finger, what we call 'yeux de perdis,' partridges' eyes. When larger, which is often the case, they are evidence of a want of care and oversight while the cheese is fermenting, or, perhaps, I had better say, drying. The larger holes vary from 100 to in rare instances 1,000 cows, but the rule is from 2 and 3 to 10 and upward to 20. Four immense cheeses are made daily from the milk of 150 cows. There are some large proprietors and a few companies engaged in cheesemaking, but as a rule co-operation is in order. The owners of a small number of cows join together. They carry their milk in pails or tubs to the cheese factories, where it is weighed for quantity and quality and they are given credit for the amount delivered, and paid in proportion later in the season. But-ter is also made in the same way. Nothing enters into the making of Swiss cheese at home except the milk, cream and salt. I have not yet had the opportunity to look around the California dairies, but from what I have seen of their product, I am inclined to believe that foreign substances enter into the manufacture of the domestic article called Swiss cheese. The yellow color is too pronounced. Another thing, while the California cheese is sweet when first cut, in a few days it turns dark, and where the knife has come in contact with it there runs a sort of whey and it has a bitter taste.

"At home, when the milk is received at the factory, it is placed in vats after having been filtered, and it is cooked or heated for an hour and a half. It is wrapped in cloth and then put under a screw press for from 12 to 24 hours, or until all of the water and whey have been thoroughly extracted. This is an operation requiring great care, and on its thoroughness depends in great measure the quality of the cheese. It is next placed in a cellar, where it is also cared for and allowed to remain from eight months to a year, as before that time it is not thoroughly made and fit to place on the market. The cheese is sold in Switzerland for about 8 cents a pound. A large portion of it enters for a great part into the food of the people, but we also export it largely, the amount last year aggregating in value \$11,000,000. Italy is our best customer at present, and Germany is likewise a large buyer. Formerly France purchased quantities of Swiss cheese, but the high duties which have prevailed of late years have almost shut it out of that market. A new commercial treaty has, however, now been made between the two countries, and I look for the exportation of cheese from Switzerland to France to again assume large proportions.

"To sum up, the excellence of Swiss cheese is in the first place due to the Alpine pasturage, which cannot be duplicated, then to the care, cleanliness, intelligence and time expended in its manufacture, and lastly to the purity of its ingredients. These last features are possible everywhere, and while nowhere else than in Switzerland can the peculiar odor and taste of the Gruyere cheese, so dear to the gourmet, be produced, there is no reason why its essential properties should not be. If I did not think so, I should not have come to California to engage in cheesemaking."

Dairy and Creamery.

There is a superstition that Jersey milk is too rich for young calves. It may be for beef calves, but it cannot be for dairy Jersey calves. To suppose that it is is foolishness.

One of the regulations of the Illinois state board of health is that dairy cows shall be cleaned every day.

"We have to make something out of something," milk or some kind of freight," said the president of a railroad recently. The road was one that did an immense milk shipping trade to a large city. The interstate commission did well at last to take in hand the milk shipping business. The dairy farmers have suffered at the hands of the railroad companies. The railroads have watered their stock to the last point of inflation. In order to get dividends on the inflated stock they put up rates to the highest notch. At the same time, to get all the freight they can, certain roads have adopted the practice of hauling milk a hundred miles for exactly the same price for which they haul it 50 miles or less. These things have been brought out plainly. "We have to make something out of something," say the companies. On the companies' part they have to do this because of the watered stock and the loss of debt under which all of them stagger. To the farmer it is left open to kick, and kick hard, and keep at it till relief comes from either the interstate commission or some other source. They who determine to help themselves always succeed.

The peculiar excellence of Swiss cheese and butter is said to come from the pasturage of the Swiss mountains. They are covered with snow throughout the winter. Underneath the snow meadow grows a particularly sweet, tender grass for pasturage. As soon as the snow melts, about May, the cows are driven up to the mountain sides, where they stay till snow comes again. With the grass are mixed certain other small and tender plants, making a delicious herbage for the cattle. It is in the summer that the bulk of the cheese is made. Why cannot American cheesemakers borrow a hint from the Swiss? Cannot scientific dairymen import from Switzerland the seeds of their grass and pasture plants?

TILLAMOOK COUNTY.

Great Wealth of Timber—The Dairying Industry.

The following is taken from the New Year Oregonian:

Tillamook bay is 40 miles south of the Columbia and 500 miles north from San Francisco. The county is about 70 miles long, lying on the coast, and is 20 to 30 miles wide. There are four bays—Nehalem, Tillamook, Netarts and Necanicum—in the county. There are many fine rivers, generally navigable several miles, and five of them empty into Tillamook bay. These streams have fine water power and are excellent for floating logs. Many small creeks are good for water power or floating logs. There are several fine lakes on Nehalem beach. Springs of pure water are found everywhere. Tillamook bay is a good harbor; and the others will be with proper improvement. Coasting schooners visit all of them.

The larger part of the county is hilly or mountainous, and covered with valuable timber. There are some fine prairies in the valleys, some open hill land, much excellent (deland) and a great deal of bottom land, the last requiring clearing. There is coal in places, but the timber is the greatest resource.

Here is the most valuable belt of timber in the United States, cedar, fir, spruce and hemlock being the leading varieties. Some of these trees are 10 to 12 feet through, and 200 to 300 feet in height, straight as an arrow, free from limbs, clear and sound. The average fir tree is 10 to 15 feet in diameter, and no denser forest is known to exist. There is enough timber here to keep a hundred large sawmills sawing a hundred years. There are several large mills and several small ones in operation, but this industry has barely commenced. The sawmills alone will cause a good city to grow up here, and will support thousands of people.

There is much fine farming land, and farming and stockraising pays, but dairying is the leading industry at present. The best butter and cheese on the coast is made here, the climate, water and feed being suited for it. There are several large creameries, besides many small dairies, and the county, though new, takes the lead of the state in the dairying business. There is grass here the year around. Hay can be easily produced, and root crops are enormous, so cattle can be kept with little expense. Small fruits and vegetables of all kinds yield abundantly. Apples, pears, plums and plums do well, and cherries thrive in some localities. Beekeeping is profitable, and the honey is of exquisite flavor.

The fishing interests here are great, and the salmon canneries give employment to many. The output of salmon—canned, dried or salted amounts to more than the wheat crop of some of the interior counties.

Gold-mining is carried on quite extensively on the beach sands.

The scenery is magnificent beyond description, and the Tillamook coast is becoming a popular summer resort. The beaches, with their picturesque arched rocks and wide stretches of white sand, attract many visitors each year, many of them camping out all summer. Clams, crabs, oysters, mussels, all kinds of shell-fish, flounders, rock cod and other fish are plentiful and easy to secure. Spotted trout are abundant in the streams. Deer, elk, bear, grouse, ducks, geese, snipe and other birds are plentiful.

The climate is mild, cool in summer, warm in winter, little or no snow, seldom any ice, no frosts, no cyclones, thunder storms rarely occur, and there is very little fog. Strawberries frequently ripen in December and January, and cattle roam the hills all winter without being fed. There is absolutely no malaria or ague, seldom any fevers; diphtheria and scarlet fever were never known here, and consumption or chronic fire as well as any other disease is rare. There is no stagnant water, and the invigorating sea breeze keeps the atmosphere purified.

The county is new, and has just begun to develop, but is making rapid strides in the way of improvement. Good roads are being built, industries are being started, towns are growing up, and a railroad is expected soon. The percentage of increase is greater than any other county in the state, according to the state census of 1880, these being now about 200 people. This is due to the fact that the county is new, and there is room for more industrious citizens who have means. It is not a good place for a poor man with a large family, unless he has an iron nerve and a good constitution for work. There is much government land yet subject to entry, but it is far back in the hills covered with brush or timber. Yet there are courageous energetic people taking places there all the time, clearing them up, and making homes, and it is cheap yet.

Tillamook city, on an arm of Tillamook bay, is the principal town and county seat. It has stores, sawmills, banks, newspapers, creameries, an academy, good schools, churches and lodges. The streets are well improved, and the town has electric lights. The population is about 1,000, and it is building up fast. There is a daily mail, daily stages to North Yambill, and in the summer to Forest Grove, on the Southern Pacific railroad. A boat makes weekly trips to Astoria, and once every two weeks to San Francisco, both carrying freight and passengers. There is a telegraph line from Tillamook to the Willamette valley.

Nehalem, Woods, Bay City, Beaver, Dolphin and Garibaldi are ambitious places which anticipate much in the future. The United States government is spending a few thousand dollars every year to improve Tillamook harbor. Fifteen thousand dollars was expended here this year, and we expect \$25,000 next season, besides a few thousand dollars to complete a road to the light house. The best time to come here is in July, August or September. The transportation facilities are better and more regular during these months.

PORTLAND MARKET.

(Wholesale quotations.)			
CHEESE—Gruyere	31	22	
POTATOES—Per 100 lbs	30	33	
ONIONS			
Wheat—Willamette	1 05	1 07	
Walla Walla	1 00	1 05	
DUCKS—Per doz	4 00	5 50	
GREENS—Per 100 lbs	5 00	5 50	
CHICKENS—Old, per doz	3 00	3 50	
Butter—Spring	2 50	2 75	
Butter—Brine	25	35	
Store, in Rolls	17	30	
Choice Dairy	40	45	
Creamery	50	55	
Eggs—Oregon	12	15	
LARD—Oregon	7	7 1/2	
Eastern	7	7 1/2	
RACONS—Chert sides	7	7 1/2	
Hams	10	11	
Shoulders	—	6	
Pork—Willamette	—	3 15	
Country Brands	3 15	3 15	

Ben Perry keeps boats to let. He has several different kinds, and can fit you out with a light row boat, or a sail boat. He also has a hand-power stern wheeler which will carry a number of persons and make good time. Boats let by the day or week, at reasonable rates.

A PERPETUAL CALENDAR.

How to Find the Day of the Week and Month of any Year from A. D. 1, to the 30th Century.

To find the Dominical letter for the year: The Dominical letter goes back one letter every year except leap year, then it goes back two letters after February.

LEAP YEARS FOR THE CENTURY.
2, 6, 10, 14, 18, 22, 26, 30, 34, 38, 42, 46, 50, 54, 58, 62, 66, 70, 74, 78, 82, 86, 90, 94, 98, 102, 106, 110, 114, 118, 122, 126, 130, 134, 138, 142, 146, 150, 154, 158, 162, 166, 170, 174, 178, 182, 186, 190, 194, 198, 202, 206, 210, 214, 218, 222, 226, 230, 234, 238, 242, 246, 250, 254, 258, 262, 266, 270, 274, 278, 282, 286, 290, 294, 298, 302, 306, 310, 314, 318, 322, 326, 330, 334, 338, 342, 346, 350, 354, 358, 362, 366, 370, 374, 378, 382, 386, 390, 394, 398, 402, 406, 410, 414, 418, 422, 426, 430, 434, 438, 442, 446, 450, 454, 458, 462, 466, 470, 474, 478, 482, 486, 490, 494, 498, 502, 506, 510, 514, 518, 522, 526, 530, 534, 538, 542, 546, 550, 554, 558, 562, 566, 570, 574, 578, 582, 586, 590, 594, 598, 602, 606, 610, 614, 618, 622, 626, 630, 634, 638, 642, 646, 650, 654, 658, 662, 666, 670, 674, 678, 682, 686, 690, 694, 698, 702, 706, 710, 714, 718, 722, 726, 730, 734, 738, 742, 746, 750, 754, 758, 762, 766, 770, 774, 778, 782, 786, 790, 794, 798, 802, 806, 810, 814, 818, 822, 826, 830, 834, 838, 842, 846, 850, 854, 858, 862, 866, 870, 874, 878, 882, 886, 890, 894, 898, 902, 906, 910, 914, 918, 922, 926, 930, 934, 938, 942, 946, 950, 954, 958, 962, 966, 970, 974, 978, 982, 986, 990, 994, 998, 1002, 1006, 1010, 1014, 1018, 1022, 1026, 1030, 1034, 1038, 1042, 1046, 1050, 1054, 1058, 1062, 1066, 1070, 1074, 1078, 1082, 1086, 1090, 1094, 1098, 1102, 1106, 1110, 1114, 1118, 1122, 1126, 1130, 1134, 1138, 1142, 1146, 1150, 1154, 1158, 1162, 1166, 1170, 1174, 1178, 1182, 1186, 1190, 1194, 1198, 1202, 1206, 1210, 1214, 1218, 1222, 1226, 1230, 1234, 1238, 1242, 1246, 1250, 1254, 1258, 1262, 1266, 1270, 1274, 1278, 1282, 1286, 1290, 1294, 1298, 1302, 1306, 1310, 1314, 1318, 1322, 1326, 1330, 1334, 1338, 1342, 1346, 1350, 1354, 1358, 1362, 1366, 1370, 1374, 1378, 1382, 1386, 1390, 1394, 1398, 1402, 1406, 1410, 1414, 1418, 1422, 1426, 1430, 1434, 1438, 1442, 1446, 1450, 1454, 1458, 1462, 1466, 1470, 1474, 1478, 1482, 1486, 1490, 1494, 1498, 1502, 1506, 1510, 1514, 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2182, 2186, 2190, 2194, 2198, 2202, 2206, 2210, 2214, 2218, 2222, 2226, 2230, 2234, 2238, 2242, 2246, 2250, 2254, 2258, 2262, 2266, 2270, 2274, 2278, 2282, 2286, 2290, 2294, 2298, 2302, 2306, 2310, 2314, 2318, 2322, 2326, 2330, 2334, 2338, 2342, 2346, 2350, 2354, 2358, 2362, 2366, 2370, 2374, 2378, 2382, 2386, 2390, 2394, 2398, 2402, 2406, 2410, 2414, 2418, 2422, 2426, 2430, 2434, 2438, 2442, 2446, 2450, 2454, 2458, 2462, 2466, 2470, 2474, 2478, 2482, 2486, 2490, 2494, 2498, 2502, 2506, 2510, 2514, 2518, 2522, 2526, 2530, 2534, 2538, 2542, 2546, 2550, 2554, 2558, 2562, 2566, 2570, 2574, 2578, 2582, 2586, 2590, 2594, 2598, 2602, 2606, 2610, 2614, 2618, 2622, 2626, 2630, 2634, 2638, 2642, 2646, 2650, 2654, 2658, 2662, 2666, 2670, 2674, 2678, 2682, 2686, 2690, 2694, 2698, 2702, 2706, 2710, 2714, 2718, 2722, 2726, 2730, 2734, 2738, 2742, 2746, 2750, 2754, 2758, 2762, 2766, 2770, 2774, 2778, 2782, 2786, 2790, 2794, 2798, 2802, 2806, 2810, 2814, 2818, 2822, 2826, 2830, 2834, 2838, 2842, 2846, 2850, 2854, 2858, 2862, 2866, 2870, 2874, 2878, 2882, 2886, 2890, 2894, 2898, 2902, 2906, 2910, 2914, 2918, 2922, 2926, 2930, 2934, 2938, 2942, 2946, 2950, 2954, 2958, 2962, 2966, 2970, 2974, 2978, 2982, 2986, 2990, 2994, 2998, 3002, 3006, 3010, 3014, 3018, 3022, 3026, 3030, 3034, 3038, 3042, 3046, 3050, 3054, 3058, 3062, 3066, 3070, 3074, 3078, 3082, 3086, 3090, 3094, 3098, 3102, 3106, 3110, 3114, 3118, 3122, 3126, 3130, 3134, 3138, 3142, 3146, 3150, 3154, 3158, 3162, 3166, 3170, 3174, 3178, 3182, 3186, 3190, 3194, 3198, 3202, 3206, 3210, 3214, 3218, 3222, 3226, 3230, 3234, 3238, 3242, 3246, 3250, 3254, 3258, 3262, 3266, 3270, 3274, 3278, 3282, 3286, 3290, 3294, 3298, 3302, 3306, 3310, 3314, 3318, 3322, 3326, 3330, 3334, 3338, 3342, 3346, 3350, 3354, 3358, 3362, 3366, 3370, 3374, 3378, 3382, 3386, 3390, 3394, 3398, 3402, 3406, 3410, 3414, 3418, 3422, 3426, 3430, 3434, 3438, 3442, 3446, 3450, 3454, 3458, 3462, 3466, 3470, 3474, 3478, 3482, 3486, 3490, 3494, 3498, 3502, 3506, 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