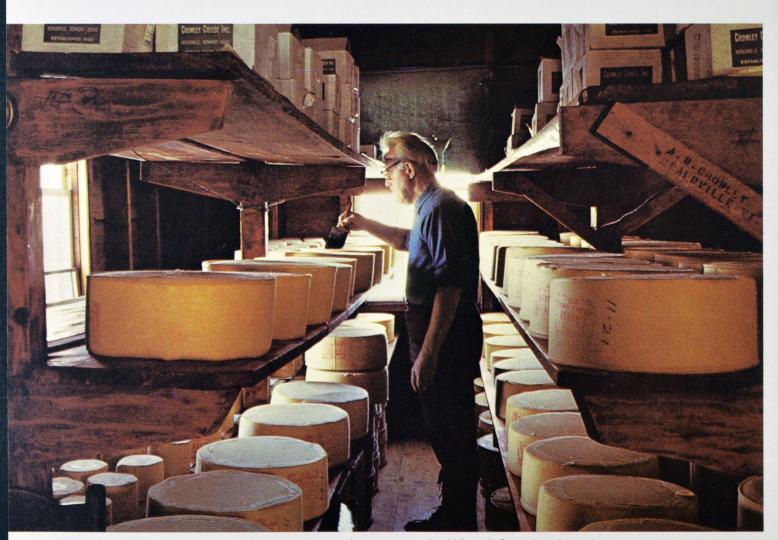


CROWLEY CRESS YACTORY

One of the eminent six cheddars still made in Vermont, and the only Colby type, is the widely-renowned product of 146-years' experience,

## THE REAL CROWLEY CHEESE

by Rockwell Stephens
Photographs by Edward P. Lincoln



Randolph Smith examines the big wheels of Crowley cheese in the aging room. The old factory's front side is shown above.

It is a familiar theory that small scale industry can no longer survive in an era of mass production and mass marketing. Nineteenth century methods of hand craftsmanship and limited volume, the experts say, can no longer provide a twentieth century living, and small village workshops are a thing of the past.

But if you drive west from Ludlow on Vermont 103 in the town of Mt. Holly and keep a sharp lookout, a small sign "Healdville" and a road branching off to the south will lead to an unpretentious, weatherbeaten building housing a firm denial of this thesis. For they've been making the now-famous Crowley cheese since 1824 or thereabouts, and in this very building since 1882, and is, thank you, doing all the business it can handle. It is the oldest cheese factory in Vermont.

This enterprise has not faded on the vine with the passing of the founders and the founder's sons as is supposed to be the usual case. Alfred Winfield Crowley moved cheese making from the family kitchen into the new factory in '82, son George took over in the 1930s, and

younger son Robert continued the tradition until late 1966.

The same hands that worked the cheese over the years under George or Robert still carry on the unhurried, careful processes that have given Crowley cheese a special identification for three generations. Richard Dunlop, Mrs. Cassie Potter and Mrs. Hilda Perkins form a veteran nucleus of the small work force producing the daily run of 500 to 750 pounds. And there is little doubt they will pass their craft on to their apprentice successors.

With the passing of Robert Crowley it was perhaps a happy accident that Randolph B. Smith and his family had long been part-time neighbors of the Crowley establishment and that he had become a permanent resident on his retirement from a career as an educator.

One thing leading to another, as he said, the spring of 1967 found him enjoying his retirement, with some surprise, as the proprietor of the factory. Not unlike many another city man he is finding retirement to Vermont a full-time occupation.

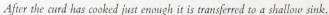
Perhaps the Crowley story is the exception that proves the rule of vanishing small industry. A century ago it is said that almost every town in Vermont had not one but several little cheese factories, for cheese is a classic example of the conversion of a perishable and relatively abundant product into an easily stored and transportable commodity. Surplus milk, impossible to transport before the advent of railroad refrigeration, could go a few miles by farm wagon to the nearest village, where a thousand pounds could be converted to a hundred pounds of cheese and easily carried to a broader market.

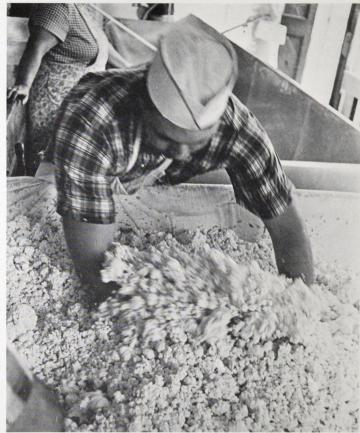
The Crowley factory was one of four in Mt. Holly town and scores of others throughout the state, and like them, took its milk from local farms. With the decline of small farm dairying — a dramatic plunge in recent years — the Crowley supply now comes from a nearby creamery in refrigerated tank trucks. The other cheese makers in the neighborhood have long since disappeared as expected. Crowley remains as one of only six cheddar-type cheese factories in the state.



The process starts with 3,500 to 4,000 pounds of whole milk gradually warmed from forty degrees. Curd is formed in about an hour.







Then it is kneaded like bread to popcorn size, then is rinsed and salted.

Cheese connoisseurs are as critical as gourmets of their wines, and among those who know a Crowley cheese there is firm conviction that no other cheese has quite its character. Crowley, like most Vermont cheese, *is* a cheddar type, but, unique here, it is a Colby cheese.

Cheddar, named from its 16th century origin in the village of Cheddar in Somersetshire, came to America with the first English settlers and has continued to be the predominant "American" cheese ever since. The original Crowley cheese is a variant later officially named Colby by the U.S. Dept. of Agriculture after a town in the heart of Wisconsin's dairy country. How it differs from true cheddar one can learn as the Crowley cheesemakers go about a day's work.

When the creamery truck arrives in the early morning with its fresh whole milk of standard 3.6% butterfat, the old steam boiler in the Crowley cellar, formerly hand

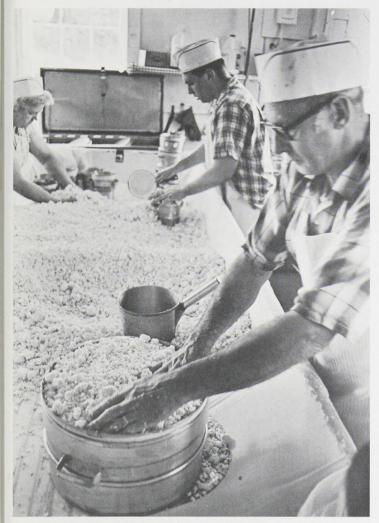
fired with good dry wood, has built up hot water for the two big cooking vats on the main floor. Stainless steel and clean as a surgeon's knife, one holds 4000, the other 3500 pounds taken directly from the truck at 40 degrees.

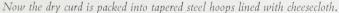
The vats look like mammoth bathtubs, but in fact rest in heavy wooden troughs containing hot water from the boiler below. As the milk warms, a pasteurized culture is added to increase its acidity (we'd say souring). The milk is stirred as it "ripens" for about an hour. Then comes the first test. A small quantity of rennet is dropped into a big graduated measuring cup of the warm milk. The cup has a tiny hole in the bottom and leaks a small stream. As the rennet acts the milk thickens and the stream slows. When this test allows only a third of the contents to leak out, the time is judged right to add a full dose of 4 ounces of rennet to the big vats for each thousand pounds of warm milk.

This starts the curd formation, which first appears as a soft custard. Frames with a pattern of crossed wires are drawn through the custard to cut it into halfinch cubes. When the whey appears in sufficient quantity on top of the batch as a signal of curd formation, a continuous raking begins with wooden rakes to keep the curd cooking evenly at a temperature a little over 100 degrees, and to develop the formation of small curds.

The developing curd is cooked for about an hour and a half. Then comes another test in which art takes over from science. A handful of curd is squeezed and as the whey runs out between the fingers the appearance and "feel" of the curd tells whether the batch is "cooked." "It's like a good cook knowing when to take the cake out of the oven," says Mr. Smith.

The watery whey is then siphoned off and the curd transferred by scoops to a







Set end-to-end, the hoops are pressed to squeeze out all the whey.

shallower vat — the curd sink — which is covered with cheese cloth. Here the curd is worked by hand, "like kneading bread," to break it down further into popcorn size pieces. A thorough sluicing with spring water follows, removing more whey and rendering the curd less acid. Salt is then added and worked in as a final step.

Now the curd, looking like scrambled eggs, is packed into steel molds (the hoops), lined with cheese cloth and ingeniously shaped to dovetail into one another to allow for compression. Placed side by side in the press, the hoops squeeze out the remaining whey and compress the curd into final form as cheese, ready for a week's drying on a storage shelf after removal from the hoops.

The big wheels, averaging 35 pounds, are painted with butter and oil to prevent cracking during this first storage period. Then all are dipped in hot paraffin as the final operation before going into storage.

This is Colby cheese, synonymous with Crowley because no other Vermont cheese maker produces it. Though classed as a cheddar type, it differs from the basic cheddar in the treatment of the curd. True cheddar is made by piling the curd, as it forms after the "custard" stage, at the side of the vat where the particles form a solid mat. This is cut into slabs, and turned from time to time to encourage draining. After a few turns the slabs are stacked and allowed to stand until the proper acidity has been reached. They are then shredded, salted, hooped, and given a first pressing. A second and longer pressing follows before the cheese is taken from the hoops, given a few days to dry, then set aside to cure.

The critical difference between Colby and basic cheddar seems to be the hand kneading of the Colby curd and the fresh water washing operation. How this affects the bacteriological action by which cheese

ripens may be known only to the chemists. But Colby does have a somewhat softer and more open texture. Colby enthusiasts will have nothing else; others proclaim true cheddar.

Both types are stored for two months to qualify as "mild," four to five months for "medium sharp," and six months to a year to become "sharp." Crowley is stored at around 48 degrees with no special provision of temperature and humidity controls other than the addition of a little ozone to the atmosphere to control formation of excess surface mold.

Among all the food products of the modern world, cheddar cheese is at least one which has escaped the chemists' adulterating touch. A slice of good yellow store cheese comes fresh from its wheel without benefit of "vitamins added," or any of the multisyllabic synthetics to "improve" taste, keeping quality, or ease of preparation.

That it is made of milk and milk only is something of a miracle since cheese of some sort has been produced even before the cow became a domestic animal. Continuing experiment has produced thousands of varieties the world over, broadly classified into eighteen basic types, of which cheddar is one. No other common food shows such variety.

Production of a Crowley cheese takes about five and a half hours. Repeated and refined over many a decade, it is still a work of hand and head, practically unchanged since the factory was built over three-quarters of a century ago.

The building has the appearance of an ample two story farmhouse, wearing its years with dignity. Perhaps half the main floor, which is no larger than your grandmother's big living room, holds most of the working apparatus, the two big cooking vats and the wooden curd sink, with the press racks ranked along two walls. Except for the stainless steel vats the equipment is obviously hand made by a craftsman who knew what he was doing and built things to last.

There is no power machinery in sight;

Crowley cheese is hand worked, but Yankee ingenuity eases the jobs that need power. The presses, where one might expect a hydraulic ram, are operated by nothing more complicated than the handy screw jack used for changing tires before bumper jacks had to be invented. And a pulley-mounted counterweight supplies the "lift" when cheeses are dipped in their paraffin bath.

The other half of the main floor has a shipping and order desk in a corner under the stairs, with a big pot-bellied stove handy by to keep things comfortable, a shelf or two of cheeses on display, including several set out for sampling, and rows of shelves for the initial aging process, well packed with dated wheels and the smaller three and five pound cheeses.

Upstairs the only concession to modernity, aside from the ozone device in the store room, is a small paneled office for Randolph Smith, and more room for storage. Years back, this was the province of one of Mrs. Crowley's daughters, who operated there the local beauty parlor.

Vermont's six surviving "hard" cheese factories: Crowley, Cabot Farmers' Co-

operative Creamery in Cabot, Kraft (National Dairy Products) at Troy, the Plymouth Cheese Corporation near the Coolidge homestead and revived through the interest of son John Coolidge, the big creamery of the Seward Family, Inc. at East Wallingford, and the relatively new plant of the Grafton Village Cheese Co. at Grafton, are all that remain of Vermont's one-time numerous village producers. Their combined production, so close to their supply sources, once made Vermont the leading cheese maker of the country. Now cheese is made in practically every state.

Vermont's hill and valley farms still produce a lot of milk, about one billion, 800 million pounds last year, which is more in fact than ever before, though from far fewer farms. A large part goes to New York and Boston markets. But a substantial part, about 100 million pounds, still goes into Vermont cheddar cheeses, and Vermont shipping records show it is far from unknown in most parts of the world, a great food staple with an honorable past, lively present, and secure future.

Proof of the cheese is in the cutting (by Randolph Smith) and the testing (by willing volunteers). Like Vermonters, cheddar sharpens with age.

