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"That frequent recurrence to fundamental principles and a firm adherence to justice, moderation, temperance, industry and frugality are absolutely necessary to preserve the blessings of liberty and keep government free." Vermont Constitution

Editor's Uneasy Chair

Subscriber Fritz Walker, Reading, Mass, last summer received a form card which carried our name, his address and that's all. It was a printer's "blank," which he somehow divined to mean his subscription had run out. "I am well aware that Vermonters are men of few words," Mr. Walker wrote, "but isn't this carrying it a little too far?" We had to admit it was.

Readers will note certain changes starting this issue in the regular columns. We report with regret the ending of Arthur Wallace Peach's literary commentary, At the Sign of the Quill. Dr. Peach, the long and popular provider of this column, now merits his requested respite. We're happy to report that he will remain an editorial associate and regular contributor. A new column on the arts in Vermont will appear later in the magazine.

The Green Mountain Postboy, which has faced us paternally across the gutters for so many issues, will continue, but now it will carry comments mainly about contemporary Vermont. Walter Hard, Sr., with his recollections of an earlier Vermont, will not be lost to readers, however. Under a new title these will appear elsewhere each Spring and Autumn issue.

The final column change is that of Vrest Orton's lively Some Vermont Ways, which we're happy to report will stay on, appearing in Summer and Winter issues.

The Fall cover scene of the Jericho Mill was well liked. But it had more "drawing power" than we realized. A subscriber in Hopewell Jct., N. Y., journeyed to Jericho to paint the original. There she found two other subscribers, come all the way from Prince Edward Island, already bent to the same task.

W. H. Jr.

THE COVER:  
Warren Case recorded this view at Earl Krantz's McIntosh orchard using as models his two boys and the Ralph Gees' girls. Beyond are Middlebury, the Green Mountains.
We take quiet satisfaction in events which show Vermont stands out from her sister states. Now comes our contemporary, Pageant magazine, with the challenging statement that Vermont (with Maine, naturally) is the nation’s poorest market for practical joke devices—the sneezing powders, fake snakes and dribbling cups.

The moral here is not immediately apparent. Perhaps, one muses, Vermonters’ native inventiveness has led them to fashion their own joke items, thus creating a commercial void. We rather think, though, that Vermonters always have been stronger on words than on props. It’s more the turn of phrase than the turn of the palm-buzzer.

The sort of practical joke Vermonters like best was executed last summer at Castleton’s Colonial Day. The Day’s parade featured nearly a score of floats and antique vehicles on the theme: “Early History of Lake Bomoseen.” Then, at the tail end of this serious parade, in slipped the fictitious “Bomoseen Moose Protective Association” entry. It was a pushcart bearing, enveloped by billowing blue crepe paper, the solemn, staring head of a moose. With classic simplicity the sign read: Moose Swimming Lake Bomoseen. The perpetrators, naturally, were the husbands of the Day’s co-chairmen.

Calvin Coolidge (sometimes) was as typical as they come in his humor. This story appeared in the Springfield Reporter. The future President, it seems, when he returned to Plymouth often visited with his grandmother, Almeda Brewer Coolidge, up in the Notch. When asked by his family, in his grandmother’s presence, why he preferred visiting at her house, Mr. Coolidge replied: “Because she lets me sleep with my stockings on.”

A pricking of formality always tickles Vermonters, and at a Federal Court trial in Brattleboro recently Witness Ferris Hale of West Windsor had forgotten his glasses, couldn’t identify some of the exhibits. U. S. Judge Gibson whipped off his own glasses and told him to “try these.” Mr. Ferris reported they worked fine, wore them all through his testimony, almost forgot to return them when he left.

A linking of Vermont to the world of the Aga Khan seems improbable, but here’s the way it came about. A lady journalist staying in Ireland discovered a fellow guest at the venerable Shelbourne Hotel to be none other than the Moslem ruler, come to visit his stables in County Kildare. Itching to perpetrate an interview, our reporter constantly was thwarted either by protocol or by gentlemen’s gentlemen. But one day she confronted him in a corridor, alone. The interview began abruptly with: “Did you ever hear of our Morgan horses in Vermont?” Suffice it to say that broke the ice. The interview was successful and the Aga Khan left, attesting that some day he hoped to go to the United States and look up the Morgan horses and Vermont.

It may have always rankled with drinkers of black coffee that they pay for cream and sugar they don’t use. But leave it to an East Burke woman to do something about it. Now, at Russell’s Drug Store in Lyndonville a brisk trade has begun in good, black coffee at 5c the cup.

Illustrations by Robert M. Chase

VERMONT Life
Shortly after his arrival at the University of Vermont Agricultural Experiment Station in the spring of 1896, a young chemist named Charles Jones began to seek answers to the many riddles of the sugar maple.

Every spring for generations the runners of busy sleighs carrying tanks of sap to the sugar house had crisscrossed the "sugar snows" carpeting the ground of Vermont's maple orchards. Cold nights and warm days—these encouraged the flow from the maple tree and filled sap buckets to overflowing. The process of tapping the trees and of boiling sap was as familiar as plowing a field to the Vermont farmer, who did not have time to wonder how the sugar maple managed this feat of alchemy. But Jones, no less than his predecessor, President William S. Clark of the Massachusetts Agricultural College at Amherst, who had conducted the first important experiments on sap flow, was interested in learning the secrets that the maple withheld.

How did the sap flow? Did it flow up, down or sideways? What were the air and tree temperatures as the flow occurred? What were the internal pressures? What was the effect of the depth of the tapholes on the volume of flow and on the health of the tree? For several years a sugar bush in Jeffersonville was rented so that Jones might study these problems. Meanwhile in Burlington research was being conducted on the chemistry of maple syrup, the problem of adulteration and on such questions as: What were the amounts of starch, sugar, water and other tree constituents during the sap flow season and other seasons?

In his experiments in Jeffersonville and at his laboratory at the University Jones found the answers to many of his questions. By inserting pressure gauges in the trunk he learned that sap flows mostly down the tree. There is
Wild Maple

At Underhill probes sugar maple and points on finer maple syrup.

Photographed by Geoffrey Orton

Measured sap flows from different trees. Sugar house is at right.

Not sap pouring out—it’s plastic tubing and experimental spout. On right side of tree is usual type of spout and bucket.

Compared to little upward pressure and none whatever sideways, owing to the fact that the vessels in the wood run up and down. While he found the sap moving up the tree on the cooling part of a diurnal cycle he learned that the mechanism in the wood, and not root pressure, is responsible for pushing the sap out. This accounted for the far greater downward pressure on his gauges. Jones measured air and tree temperatures and studied the attendant patterns of sap flow. He found that the maple stores starch in summer and fall and converts the starch to sugar in winter, and especially in spring.

While the amount of sap obtained from a tree depends upon the number of tapholes and how deep the holes are, he found it uneconomical to tap more than three inches deep for the reason that the extra amount of sap obtained is not proportionately great enough to be worth the effort.

Continuing his studies for a number of years, Jones, together with Professors H. A. Edson and C. W. Carpenter in 1912 began an investigation of the microorganisms in maple sap and their effect on the quality of the syrup. Maple sap is as perishable as milk. Many organisms from the air multiply alarmingly in it and it was these organisms that the scientists undertook to isolate and identify.

It had gradually become clear that the color and flavor of maple syrup are extremely dependent upon the conditions under which the sap is concentrated—that light-colored, delicately-flavored syrup could not be made in the primitive iron kettles pictured in old lithographs. Contamination with unclean buckets and transporting tubs or evaporators tended to cause the final product to be much darker in color and stronger in taste. In the latter 1800’s an industry devoted to making evaporators and other equipment had thus sprung up. Evaporators and other equipment have been developed through native inventive genius and an increasingly intimate knowledge of the
problems involved. Of these, five firms are still active: the Grimm Evaporator Company of Rutland, the Leader Evaporator Company of Burlington, the Lightning Evaporator Company of Richford, the George H. Soule Company of St. Albans and the Vermont Evaporator Company of Ogdensburg, New York.

Eleven years ago another group of scientists, this time in the Botany Department of the University of Vermont, began again to study the maple tree intensively. Since many advances in the plant sciences and in chemistry had been made, and since there were new techniques and new instruments, prospects were good for further analyzing problems in tree biology in general and the maple in particular. In order that experiments might be conducted, a two-hundred acre farm in Underhill called the Proctor...
before, but he and his associates were soon testing 4,500 trees, some of them for a period of twelve maple seasons. For best results the sap was tested at the spout and all the trees of a bush were tested on the same day. It is fortunate that he was not satisfied with the observations of the first year, 1944. Of the eleven years studied that was the year with the sweetest sap. A tree that tested over 7% that year has not tested above 6% since. Year in and year out sap of the average sugar bush tests between 2 and 3%, with the poorest trees having about 1% sugar in their sap. Charles Jones had found that 86 gallons of 1% sap are required to make a gallon of syrup, but only 17 gallons of 5% sap are necessary. Such variation gives the owner of a "sweet" bush a decided advantage over his less fortunate neighbor, who must gather, haul and store greater quantities of sap and spend more time in boiling off the excess water as steam. Since the seeds from good trees will not produce seedlings true to type it is necessary to propagate them from graftings or cuttings in order to establish maple orchards with trees of higher sugar content.

There are records of individual maples having been tapped for over 100 years. This of course cannot be done if the trees are badly diseased. A wound in a tree is an opening for disease-producing organisms to enter and, from this point of view, a taphole is a serious wound. Professor Thomas Sproston, the plant pathologist, and a graduate student have learned how the wood-decaying organism infects the tree and causes the extensive discolored areas above and below the taphole, an important step in controlling disease.

Meanwhile Professor James Marvin and Miss Mary Greene have been restudying the old question of how warm days and cool nights in early spring influence the flow of sap. Their research has been greatly augmented by their ability to add nine months to the period of sap.
Marvin at the Instrument House checks recording potentiometer. It writes temperatures of trees' bark, wood, spouts and of the air.

Research staff developed recorder, above. Linked to the tipping heads, it charts simultaneously rates of sap flow of twelve trees.

Below: Nelson Griggs of the Vermont Bureau of Industrial Research links together separate sap feed lines of plastic tubing.

flow by keeping young maple stems in cold storage until they are needed for experiments. During the maple season automatic instruments record temperatures and flows at the Proctor Maple Research Farm. An important finding has been that twig temperatures appear to control the flow of sap and that the length and temperature of the cooling period before a flow is more important in determining the amount of flow than the temperature on the day of the flow.

Most of the research of the Vermont group concerns the sap before it gets to the bucket. Another great area of investigation is the processing of sap into syrup. One little-known fact is that sap acquires the maple flavor only through boiling. If it is concentrated without heating no maple flavor results. The chemistry of maple flavor development is not completely understood but is being actively explored by other groups. As a result of these studies the farmer can look forward to new techniques and equipment for producing syrup.

Spring is a busy time at the University of Vermont's maple orchard, for not only are the experiments going on but a local farmer is tapping the trees and making anywhere from 150 to 300 gallons of maple syrup in a typical sugaring operation. Seven-hundred University students, arriving for their annual old-time sugaring-off party, add
considerable colorful activity to an already busy scene.

Vermont sugar maples are natives—at least they have been here since the last glaciation. They are wild plants which vary considerably in the quality of sap they produce. Not only do certain trees produce sap sweeter than others but certain sugar bushes constantly produce a syrup that is lighter colored. A uniformly fine product is the goal sought through the experiments at the Proctor Maple Research Farm. In reaching it the scientists hope to find answers to many basic problems of tree physiology. It is hoped and expected that before long the domestication of the sugar maple will have been accomplished. This should prove of very real value to the more than 2,200 maple producers in the State. In their minds’ eye the University of Vermont botanists can see planted orchards of high-yielding sweet trees on our Vermont hillsides adding their fall colors to those of their wild neighbors. END

Fred H. Taylor uses a hand refractometer to measure the sugar content of this tree’s sap. Beyond is the Farm’s sugar house.

Below: Carl McClellan with his brother, Floyd, runs the sugar-making operation. He is drawing hot syrup into a hydrometer cup.
Rock climb

Though hiking is one of Vermont’s most popular pastimes for young and old, rock climbing, in the state is not a common sport. The Green Mountains are just that—green, covered with trees. Few reach above timberline where the best rock climbing is found.

The few Vermonter who do climb the rocks are mostly veterans of the Mountain Troops, who received this training while in the service. Other enthusiasts are Europeans.

One of the top climbers from the “old country” is Adi Joerg, from Garmisch Partenkirchen, Germany. Adi is now a Vermonter and lives in Stowe. A tennis and ski professional, he is, perhaps, even more skillful on the rocks. He keeps in shape with practice climbs on nearby Mt. Mansfield.

Rock climbing looks dangerous and it can be. But with proper equipment and the aid of an expert guide, it may be classed among the safest sports.
Spectators gasp and call them daredevils, but this young Vermont housewife finds it's safe and fun.

Left: Adi Joerge with beginner Mary Bourdon at the climb's scene, Mt. Mansfield.

Left Below: Equipment includes nylon rope, rucksack, hammer, pitons and snap links.

Right: For safety they're roped together. One climbs while belayed by the other.

Below: Adi chooses the best climbing route, finds a good place to pause and look down.
Right: Adi is rappelling down a rock face, a technique that’s safer than it looks. It’s an easier way to descend than climbing down.

Above: Climbers’ goal is reached safely.

Right: Firmly braced and tied to rocks as added precaution, Adi uses a shoulder belay to catch the climber should she slip.
ON A BACK ROAD near Highgate Center a big maple tree stands, overshadowing a farmhouse porch. From it come the gay sounds of children's voices. This is the farm of Simeon and Bernadette Gagné and their seven children.

Eleven years ago they came here. Simeon first raised a barn, cleared hay land and finally built his own house. Many French-Canadian families have settled on Vermont farms. They have labored hard, have raised large, fine families. Together with their children they've worked the land. The early years were difficult but soon they built the huge, modern barns, bettered their herds, bought new machinery. Later they improved their homes. Their accomplishments weigh strongly in northern Vermont.

Today most of the children are grown and married. Some have gone to the larger towns, many settled on land of their own. The large family farms now are few. But there still are some large families working their farms together. Such is the family of Simeon Gagné.

Life was hard for them at first but soon the children were able to give a hand. Simeon still does most of the hard farm work helped by 17-year-old André. When Mrs. Gagné was ordered to take more rest Jeanne d'Arc, 19, and Christine, 18, took over the household cares. Christine, who became a skilled typist in high school and may take up secretarial work, manages the home and farm accounts.

Bernard does the chores. He brings the cows in from pasture twice a day and helps milk. Even with milking machines it's quite a job for a 14-year-old to handle fifty cows. Lately Harvey, 11, has become his helper.

Twelve-year-old Adrien drives the tractor as if there were nothing to it. And even Leonard, the youngest who is just eight, often gives a hand with the work.

But it isn't just milking, haying, planting, harvesting and the sugar bush that occupy their thoughts. There's always time for fun. They're happy belonging together.

Sometimes they buy a new piece of farm machinery. Next will be a hot water tank to go with their modern kitchen and bath. Simeon is a fine carpenter and plans many improvements.

Someday soon a beautiful new barn may replace the old. Meanwhile, the Gagnés, a happy, closeknit family, share the fun and the work of a Vermont life.
Between the insisting duties fixed by growing crops and feeding cattle, each family member follows his own desires. The mailman’s visit is a daily excitement to some. For others a nearby fishing stream may beckon. While the girls are deep in domestic matters, an impromptu roughhouse may develop by the barn.
The day is marked by definite rounds. Laggard sleepers rise, protesting, to a big breakfast, cows must be fetched, rain or not, for the morning milking.
The good farmer makes much of what he needs. A day awaiting the start of haying may be a good time to mend a wagon, go to town and shop, to transplant turnips, or to slip off fishing again.
Sonja & Angelo Lomeo spent three days with the Gagné family to secure these memorable pictures.

The weekend is a pause from most labors. Clean floors demand clean feet. Later there'll be evening prayers, but first perhaps a visit to Uncle's farm where Simeon's barbering skill is put to work, while the youngsters sit enthralled before the magic screen. Sunday means the Church. Fair weather may give way to rain, but the front porch shelters an old and pleasant child's diversion.
Do you have a peat bog on your land? Many Vermonters have and don't know it. For George Buchtenkirk, its discovery led to a unique and successful business. He now sells his product widely in Vermont and New Hampshire.

Buchtenkirk, an architect, first came to Vermont in 1941 and purchased a small farm in Barnard where he and his wife and two daughters planned to spend their summers. The house, when remodeled, was what the family had been looking for. The only drawback was an unsightly swamp only 120 feet from the front door. The bog also proved to breed some of Vermont's healthiest mosquitoes.

The Buchtenkirks set out to see what they could do about the swamp, hoping to have a swimming pool in its place. While pulling cattails and digging in the mud, Buchtenkirk found what most people would term muck. His architectural background, which often included landscaping and the use of soil conditioners, left little doubt in his mind. This was not muck. He had found peat.

An analysis from Burlington foretold the Buchtenkirk future. His discovery was peat and a very fine peat at that. The substance would make a perfect soil conditioner.

Peat, Buchtenkirk explains, is the accumulation of...
At the edge of the peat bog, with one jeep trailer loading beyond, the dried peat is run through the cylinder mill preparatory to its bagging.

Old Barnard poorfarm (below) bears little resemblance to former self.

thousands of years of decaying vegetation in a damp area—a bog. When refined it is weed-free and capable of holding much moisture. “Kirk’s Peat,” his trade name, is widely used by nurseries because of its fine growing properties. When mixed in, it loosens clay and heavy soils and gives substance to sandy soils.

“The Humus of the Ages,” as Buchtenkirk calls it, when refined is a brown granular substance resembling dark sawdust. In addition to being a conditioner, which can be applied directly to the soil, it has other uses. As bedding for animals it mixes with the manure, producing a rich fertilizer and soil conditioner. Peat also makes a moisture-absorbing bedding. When pressed into bricks, peat is a long burning fuel, so used in many parts of Europe where a shortage of wood and coal makes it practical.

Sometime after finding the fish-hook-shaped bog, he and his family moved to a larger farm adjoining his land. Ironically this was the old Barnard poorfarm. On this farm, which commands a beautiful view of the Woodstock Valley, he reconditioned a small barn which now doubles as a studio for architecture and a main office for his peat business. Here he samples and packages the peat. Testing-samples of dirt and peat line the walls of the rustic build-
In the converted poorfarm barn, which also houses his architectural studio, Buchtenkirk loads plastic bags of peat for store delivery. It's marketed through nurseries, florists and general stores. Below is the odd-shaped stone he unearthed in the center of the bog.

ing. In the center are the architect’s drawing boards. The product is packaged in neat transparent bags ranging from small samples to 25-pound sacks for store handling.

Like Vermont’s mountains, rivers, and lakes, peat owes its existence to the working of the ages. Five hundred to five thousand years of decay in a moist area which is constantly supplied with fresh water is the recipe for high-quality peat. Bogs may go as deep as 80 to 100 feet.

Since 1950 when Buchtenkirk actively went into the business, he has dug down 24 feet in some parts of his bog. This was more out of curiosity than necessity, he says. The white-haired, bronze-faced man explains that the ten-acre bog is capable of producing an undetermined amount of peat. “To date, we have only scratched the surface.”

Working a bog can be interesting, and hazardous. The moist consistency of the deposit makes it difficult to operate digging equipment. On several occasions the wet substance has practically buried machinery. Now, Buchten-
kirk hires a drag-line, which piles large deposits on the
banks to dry out before they are separated through a large,
mechanically-operated cylindrical wire screen. When
piled, the peat must go through at least one thaw and one
freeze to give it a high quality.

The bog's equipment includes two jeeps, two trailers,
the self-designed separating screen and a loading belt.
This is enough to keep several men busy without begin­
ning to produce enough humus to supply the potential
demand.

While a drag-line was at work several years ago it un­
covered a peculiarly shaped stone, which Buchtenkirk
believes was an Indian plow. Its shape indicates that it
had been carved for such a purpose. Other interesting
phenomena uncovered include deposits of snail shells,
suggesting a large body of water once was located there.

While Buchtenkirk is the largest distributor of peat in
Vermont and New Hampshire, he is by no means the only
person owning a peat bog. Many land owners through­
out Vermont and New England, without a doubt, have
deposits of good quality peat. Some have discovered it
and have sold it in small quantities, while others are
probably unaware of its presence and possibilities. Poten­
tially Vermont peat is one of the best grades in the coun­
try. To the best of Buchtenkirk's knowledge it is better
than the deposits of Michigan, where much has been
developed and sold.

Buchtenkirk, who can be as enthusiastic about peat as
about his extremely successful architecture business,
encourages people to investigate their land for peat
deposits. "If you think you have peat," he says, "send a
sample to the Vermont Extension Service in Burlington
and it will be analyzed without charge."

The business is not as successful as it could be if he
devoted full time to it. On occasion architecture has
interfered with the peat work. Several years ago he was
called suddenly to work on plans for the Thule Air Base
in Greenland, and was gone four months.

Mrs. Buchtenkirk, who knows as much about peat as her
husband, occupies herself in a different manner. Her first
volume of poems "Small Answer" was published in 1951,
and she has just finished a novel. Her flower garden, as
one might guess, flourishes in a mixture of peat and dirt.
She has found that flower seeds grow fifty per cent faster
when started in pure peat. The gardens surrounding the
Buchtenkirk's colonial house offer striking evidence also
that they are stronger and more brilliantly colored when
fully grown.

The family finally got its swimming pool when a small
bog next to the house was drained. Ultimately the larger
bog will be emptied, after thousands of yards of peat have
been removed. Then water will seep in and a small lake
will mark the sight of this fine Vermont enterprise, which
only had to be discovered to be successful.
Vermont, of course, isn’t just lovely landscapes and pleasant places. It is also people. While we have stiff competition and are beaten by cows in the census, I prefer people.

Along with a continuing study I am leisurely making of the industries of Vermont, I find it an agreeable change of pace to take for casual study a few very individual Vermonters—particularly writers and artists, who are industrious in their own way.

One of them is Artist Ella Fillmore Lillie, and I found a call upon her quite as interesting and uplifting a way to spend an afternoon as it would be to take a chairlift to the top of Mt. Mansfield.

Art isn’t everybody’s “dish,” but Mrs. Lillie has struck a vein which has received the highest praise both of critics and the public, and she has so identified herself and her work with Vermont that Vermonters and “associate members” of our state should welcome more intimate acquaintance with her, her husband, her home and her art.

She lives in a house which Charles D. Lillie and she designed along studio lines and erected fifteen years ago atop a hill at Danby. Danby is the town next north of Dorset and Manchester, each with notable art colonies, and next west of the town of Mt. Tabor, an almost uninhabited township and mostly included in the Green Mountain National Forest. From her east-facing terrace Artist Lillie looks out on the heavily forested, huge,
By CHARLES E. CRANE

Photography by
DONALD WIEDENMAYER

a century ago. One of her forebears, Lavius Fillmore, built the beautiful church at Old Bennington and the Congregational Church at Middlebury. From her early childhood in Minneapolis Ella Fillmore kept coming back to visit Vermont in the summer.

A matter of argument about red flannel underwear led to her entrance into the world of art, as a shift from the stage. At the age of five she was to play an elfin part in some winter play when the Minnesota weather dropped way below zero. Her parents insisted that it would be the death of her to appear on show night in the ethereal underwear in elfin fashion. To wear the red flannel underwear was the price Ella would have to pay for her debut on the stage. Either that, or stay home. It was only when her father promised her a fine set of paints that she calmed down, stayed home and launched herself in art. She has made a really notable success in that career.

Ella Fillmore did well enough as a child to convince her parents she should be sent to the Minneapolis Art School, and after graduation she went on to the Chase School in New York. One of her early teachers was the old Munich master Robert Koehler, another, Hayes Miller. Her study also included time in the Chicago Art Institute and with Ambrose Webster in Provincetown.

"How come," one of our visiting party asked Mrs. Lillie, "that you chose lithography?" That was a good question for it seems there are a mere handful of creative elongated mountain. There are many “hogbacks” in Vermont but Dorset Mountain with long and almost level skyline (very unlike the squiggly signature of most Vermont ranges) is like a sleeping rhinoceros. On its back are Vermont Marble Company quarries. In earlier days Silas L. Griffith, operating for lumber in this area, became Vermont’s first millionaire, but today a more curious industry is fern-picking.

We noted the Lillies’ house was almost surrounded with grape arbors. Seated in her studio, we learned a lot from her about creative lithography, her favorite medium though she has also worked in pencil and in oils.

First she wanted to stake out her claim to being a real Vermonter. The fact that she was born in Minneapolis has diverted attention from the fact that she is of Vermont lineage. Her ancestors migrated from Vermont just about
lithographers today as compared with artists in all other media.

Well, Mrs. Lillie allowed it was not until 1938, after being well versed in pencil and oil, that she went in for creative lithography.

It was partly because her taste attracted her in that direction and partly a matter of making money. Oils have to command a price above the pocket of all except the very well-to-do, but original lithographs, like etchings, can be multiplied sufficiently to sell quite readily. She identified herself with many rotating print shows, received national recognition for her prints and took innumerable prizes.

How it is done, I can but feebly describe. Mrs. Lillie, seating us in her studio, drew out the heavy stone, some 12 by 14 inches and three inches thick. "There are nearly eighty separate processes," she said, "in doing a strictly handmade lithograph." Many are very technical and most of them very delicate. The word lithograph today is loosely used, and it generally refers to work done commercially and photographically on zinc or aluminum plates, but the few real creative lithographers, such as Mrs. Lillie, draw directly on stone. It is a sort of limestone or Kelheim that comes from the Jura Mountains in Bavaria, and no lithographic stone so fine as this comes from any other place yet known.

Mrs. Lillie sketches on this stone with a well-sharpened grease crayon. When the drawing is finished it is fixed with gum arabic and nitric acid and then washed off with turpentine. A film of water is run over the stone and it is ready for the inking press. The discovery that man could thus draw on and print from stone was made in 1791, the very year Vermont was admitted to the Union, in Bavaria by Alvis Senefelder.

The secret behind it all is the age-long disaffinity of oil and water. The ungreased portions of the stone, wet with water will resist ink, while the greased lines or shadings will accept it and transfer that design to paper. Many noted artists in the past century and a half have turned to the lithographic stone—Daumier, the great French caricaturist—Goya, Delacroix, Whistler, Bellows. The saying is "You can't get blood out of a stone" but it is a marvel to me that Whistler and Mrs. Lillie for instance, can make stone evoke such sensitive moods as are found in their lithographs.

And just what are Mrs. Lillie's pictures like? She had many on the walls of her studio, among them some of my favorites. Although she has favored Vermont scenes, she has also some prize pictures done in Maine, particularly around Monhegan Island and some as well along the Massachusetts coast. Indeed she has worked from Maine to Panama.

What first led me to class her as a genius was her way with an old board. In "Old Wood" (near Pemaquid) she had done a lobster wharf where the old planks are done with such fine-line detail and naturalness you can almost hear the boards squeak. She does the same in a lithograph entitled "The Open Door" looking upon a wharf. My judgment in this is confirmed by the fact that the "Old Wood" lithograph was recently purchased by the Metropolitan Museum in New York.

Most of her works are mood pieces, and the mood mostly in tranquility. She has a moody late twilight interpretation of "Marblehead" (a large house of seven gables order), "Man Plowing," on a side hill, of course; and two considerably different studies that were exceptional; "Unspoiled Vermont," the old, old Robinson carriage shop in Pawlet sagging with age; and best perhaps "Boundary Dispute," a stump fence (near Vergennes) with fiercely fighting birds above it. Others are calculated to bring on nostalgia to exiled Vermonters. Some of her work has the delicacy of Japanese prints.

The Lillies built their basement as a print shop and equipped it with an old hand-worked litho press, but her prints are now made by a master of the art, George Miller of New York and Burlington.

Mr. Lillie, who also originated in Minneapolis, had a career in engineering, much of it spent in Panama, and is of invaluable aid to his wife in organizing shows, in sales of her work and in proud appreciation. Every year he is one of the leading workers in arranging and conducting the Southern Vermont Artists exhibitions at Manchester, which invariably are great successes.

Mrs. Lillie's lithographs are in so many museum collections that they cannot be listed here. They include Library of Congress; The Metropolitan in New York; Boston Museum of Fine Arts; California State Library; Dayton (Ohio) Art Institute: Carnegie Institute; Pittsburgh; Chicago Art Institute; Savannah, Macon and Atlanta, Georgia; Memphic, Tennessee; Gloucester and Marblehead; Fleming Museum in Burlington; and many others.

Since 1938 she has accepted invitations from twenty cities to put on "one-man" shows, and she has won upwards of a score of prizes.

The golden age of creative lithography was from 1850 to 1900. One wonders if the stirring of new interest in it on the part of many artists may not indicate another golden age for this subtle, moody medium may not be at hand. If so, Mrs. Lillie's work belongs well up in front in this movement and Vermonters may well be proud of her. Anyhow she seems proud of being a Vermonter.
Spring Plowing
Lago de Patzcuaro

High on a Hill

VERMONT Life 29
GOOD MANY PEOPLE, when they picture Vermont, think of old bridges, peaceful country landscapes, and ancient craftsmanship. But Vermont is also up-to-date, whether in its modern dairies or in the traditional enterprise of its citizens adapted to new fields. The story of Polygraphic Company of America illustrates this combination of old and new. For Polygraphic combines an ancient craft—printing—with the latest developments of chemistry and mechanics which make offset lithography possible. Skilled craftsmen equipped with amazing new techniques accomplish a miracle of color reproduction which was impossible only a few years ago.

Bordering Route 67A where the road from Bennington makes a right turn to head for North Bennington, there stretches a group of buildings in which the once famous
Kiddie Kars were made. For more than 125 years there have been mills at this site, taking advantage of a good fall of water where Paran Creek drops down toward the Wallowa-mac. First a cotton factory, then a mill to wash iron ore occupied the place. Then, as times and fashions changed, came stereoscopes, desks, toys.

Today, keeping abreast of the times, the reconverted factory turns out some of the finest color printing in the country. Books for such major publishers as Harper Brothers, Prentice-Hall or Harcourt Brace, a souvenir leaflet describing Cinerama, souvenir books for Paramount Pictures, Warner Brothers or educational leaflets for International Business Machines pour from the eight big presses day and night.

Most color lithography plants are located in cities. Why did Polygraphic decide to settle on the edge of a village of about 800 in a town whose population is hardly 13,000?

Well, back in 1936 the company was operating in four floors of a building in mid-town Manhattan. It had developed out of an effort on the part of Robert Werblow and his brothers to sell the printing trade film to replace the clumsy photographic wet-plate. Printers weren’t interested. In order to convince them, the Werblows set up a small offset press of their own. Soon they were taking business away from the plants which had refused to use their film. Their process was faster and cheaper than the old method.

Orders for their film were soon pouring in and offset lithography (printing from a rubber roller called a “blanket” instead of from type) began to come into its own. Polygraphic sent out lecturers and ran plant tours to convince advertising and sales executives that offset was the answer to their needs. Meanwhile it worked to improve the process.

By 1936 the printing end of its business had grown so large that the Werblows decided to move out of New York. The H. C. White plant at North Bennington was vacant. Since many other mills in the area were idle, the town offered to remit taxes if Polygraphic would settle there, but the firm turned down the offer, preferring to bear its share of civic expenses. Administrative, sales and art departments remained in New York.

But could an industry as highly technical and specialized as offset lithography find the right kind of help in a small Vermont village? The success or failure of the move would depend upon the quality of the people Polygraphic could hire.

Along with the presses came a group of skilled craftsmen. They set up their elaborate equipment—huge cameras, arc lights, vacuum frames, closely calibrated marking tables, dark rooms. They began to hire and train. There were plenty of good people looking for work, but sometimes hiring was almost accidental, like the time one of
Vermont-born Bruce La Vigne and Charles Griffith, color strippers, fasten film to sheets of plastic.

Photographer Joel Towart, right, another Vermonter, modifies the negatives with chemicals and water.

Dexter Shultz, left, operates a Polygraphic powered paper cutter. He also is a life-long Vermonter.

Henry Gratton gives daughter Madeleine Jean pointers on his favorite sport. Gen. Stark's troops passed here to the Battle of Bennington.

Opposite: Weighing a batch of red ink before mixing for the presses.
the Werblow brothers was immobilized by a flat tire. A man came along who changed the tire and refused an offer of pay. “What I need is a regular job,” he said. He got one. Today this man operates a two-color press—one of the best jobs in the plant.

Gradually Vermonters learned many if not all of the delicately skilled jobs that go to make color offset. Anyone following a job through the plant today is bound to be amazed by the human ingenuity displayed not only in the many chemical and mechanical processes but by the high degree of personal proficiency required. A steady hand, a sharp eye and know-how based upon years of experience are indispensable.

Take, for example, the picture of the American Export Lines Independence which Polygraphic was asked to reproduce from an oil painting. First it goes to Jack Schoenberg, head of the lithographic department. Then Spencer Haynes, color photographer, makes four shots of it in a huge, motor-operated camera—one for each of the colors to be used on the press. Sometimes as many as eight colors are printed. “Opaquers” working with small brushes blank out spaces where no printing is desired. From the negatives, positives are then exposed through a screen which breaks the picture into thousands of tiny dots. Each dot must be exactly placed to produce good printed work.

In the process art department John Just and a staff of artists work over the films with air brush and chemicals until exactly the right shading and intensity are obtained.

Next the films go to the stripping department. Here, working on huge tables whose tops are ground glass sheets lighted from beneath, Werner Sauer and his staff stick the films together with adhesive tape on a large piece of transparent plastic. Then they go down to the plate room.

All day long in one ground-floor room large tables jiggle back and forth, forcing hundreds of steel balls covered with an abrasive compound to grind a smooth grained surface onto pieces of sheet metal measuring about six by four feet. These are the “plates” which will go to the presses. But first they must go through an intricate process of preparation for which Marion Rice is responsible. First the grained plate goes into a large whirler. A sensitized solution is poured over it and the whirler begins to turn. After twenty minutes an emulsion covers the plate, which then goes into a vacuum frame together with the film on which the picture of the ship is outlined in thousands of dots. A battery of arc lights is turned on. It sputters and glows for about seven minutes. Then the plate is removed to a special table where exhaust fans remove the fumes while it is developed and fixed with chemicals which etch a pattern 3/1000ths of an inch deep! From this almost...
imperceptible series of humps and hollows as many as 200,000 printed impressions can be made.

Now the plate must be carefully rubbed by hand with alcohol, lacquer and ink. Finally, after being dropped into a bath of hot water and scrubbed to remove all the remaining emulsion, it gets a "facial" of gum arabic. It is now ready for the press room.

The big presses print two colors at a time, so a four-color job like the Independence requires two runs. Inks of the correct shade have meanwhile been carefully mixed and blended. The plates—one for each color—are wrapped around large rollers in the press. They must be exactly placed or the colors will fail to register correctly. For a perfect impression, every part of the high-speed press must be in perfect adjustment. Cutting and folding the printed sheet of paper complete the operation.

To keep the big presses running requires a staff of 200 in New York (about 400 are employed in Bennington) to do the sales, administrative and art work. In the greeting card and children's Christmas book business Polygraphic not only prints, but also originates and sells what it produces. Christmas cards must be on the drawing board a year before they are sold and shipped. Women will be sorting and boxing them in Bennington during the early spring. Other greeting cards keep the department busy throughout the year. As styles change, equipment must change too. Ribbons and other fluffy attachments are out of favor at the moment, thus eliminating fussy handwork. A flocking machine applies fuzzy material in any shape and color; a bronzing machine puts a metallic surface where the design calls for it.

When Polygraphic moved to Vermont, it took a big risk. If competent, skilled help could not be found, a very large investment would go down the drain. But the company's faith in Vermonters as reliable workers paid off. Today the plant at North Bennington is one of the best-known in the business, with a payroll of about $1,000,000 a year. With Robert Werblow as president and James Werblow as vice-president and sales manager, the company has maintained a production rate that is high both in quantity and quality. Earl E. James, who first came to work in Vermont in 1926 and who is widely experienced in management engineering, serves as vice president and general manager, while Harold Searles as assistant treasurer looks after financial and personnel matters. A teletype line between New York and Bennington keeps the two ends of the business in constant touch. The company's own trailers deliver its output overnight to New York.

What about the people who work at Polygraphic?

Says Henry Gratton, shipping foreman: "I met my wife, Madeline March, at Polygraphic in 1942. We were married in June, 1945. We have a nice family and home and are very happy. Polygraphic has meant a lot to us."

The Grattons live in a house which was built and sold to them by the company. Hank Gratton, who was born in Bennington, in his spare time is a sportsman who likes the fishing, hunting and gardening Vermont affords. Many Polygraphic people share his enthusiasm for combining country living with skilled work and high pay. The lithographic business has one of the highest wage scales in the country. Pressmen make as much as $8,000 to $10,000 a year. A number of the skilled workers have college and art school background. There is little turnover, and the plant provides steady employment, usually running two or even three shifts.

In addition to renting or selling houses to employees, the company runs its own buses to bring its people to work, provides hospitalization insurance, furnishes uniforms for its ball team, and has a liberal vacation plan. Recently when a worker on hourly wages broke his ankle and was out for six weeks, the company looked after him. The lithographic department is organized as a local of the Amalgamated Lithographers of America. Union and management officials meet monthly, or oftener if necessary, to discuss matters of mutual interest. The union contributes to local charities and operates a retirement plan in addition to the regular social security benefits.

"Offset lithography is just coming into its own," says Robert Werblow. "The colorful annual reports and catalogs which are appearing now were too expensive to produce only a few years ago. The industry has a great future which Polygraphic, as one of the leaders, will share. We are glad we came to Vermont, and we believe other industries too will find here the answers to their needs. Decentralization of industry provides better working conditions for employer and employee alike."

To back up his contention, Mr. Werblow on the occasion of Polygraphic's thirtieth birthday recently arranged a meeting between Vermont's Governor Johnson and a number of Polygraphic's important customers, leaders in American industry.

The Polygraphic story proves what many Vermonters know—that in Vermont it is possible to combine modern living and working with the relaxing and invigorating assets of life in the country.

END
EXPLORING
UNDERGROUND
VERMONT

There is more to Vermont than meets the eye. There is the Green Mountain State's underworld into which comparatively few have descended and fewer still have ever written about. But that does not mean there's any lack of caves, much less of fantastic tales about them. Let's take a look at some of Vermont's bottom-side and its legends.

We shall enter the subterranean world of Vermont at Tri State Corners Cave, where the boundaries of Massachusetts, New York, and Vermont meet. The cave is a strange vertical cleft through which one can descend some 150 feet before reaching a point where the walls come too close together for further progress. Legend has it that at the bottom of the slit a horizontal passageway leads northward for miles. Are you really thin? If you are, then maybe you can make a check on the actual extent of the cave. But come equipped with a good rope and safety helmet, for toe holds are none too good and the schist none too solid.

Meanwhile we'll go on above ground to the more inviting marble and limestone caves along the western part of the state. On the outskirts of Bennington rises Mount Anthony. Here, after a short walk through orchards, you will find a pretty little cave about 150 feet in length, though if you should happen to meet the right people in searching for it you would learn that it reaches down into Massachusetts, some ten miles to the south. There's no need for you to verify this statement, for some years ago a group of cave explorers from Springfield, Massachusetts, did the job. Their account of the cave's modest dimensions touched off a comic controversy between the Bennington Banner and the Brattleboro Reformer, the editor of the Reformer chiding the Benningtonians for their gullibility in permitting the fable to persist until the exposure by outlanders.

But let us not be discouraged by such debunking. There is the underground passage which an "eminent geologist" whose name has vanished in obscurity is asserted to have discovered many years ago. It starts where a stream vanishes into the earth far upstate in Vermont, and ends somewhere down in Connecticut. Now just where in Connecticut that place is, I don't know. In fact, don't question me too closely as to where in Vermont the stream disappears. But the distinguished scientist is reported to have put a dye into the stream in Vermont and raced down to Connecticut to discover the material emerging there. Rediscovering this stream should furnish a good summer's problem for somebody.

One of the most remarkable caves in the state is Skinner Hollow Cave, far up in the folds of Mt. Equinox above the ancient settlement of Foolville. This is a true ice cave, a glaciere where you can sit down on solid blocks of ice in mid-summer. It is hardly necessary to add that according to some this cave runs clear through the mountain to Sandgate near the New York side. Skinner Hollow was named for a governor of Vermont who once owned the property, but on our two visits we were the welcome guests of Nat and Hermione Canfield, bachelor brother and sister who used to live in a weather-beaten house close beside the main highway. The trail to the cave runs
through the pasture and up into a pretty sugar bush. Beside the trail flows a stream that arises high up on the mountain. One branch of this stream dribbles down the bared rock of the Devil’s Wagon Road, the result of an ancient landslide. Another branch joins it after tumbling down a more recent slide which we named Satan’s Ski Run. Near the junction of these streams the entrance of the cave is to be found, up against a limestone cliff. It is a semicircular sinkhole half filled with logs and leaves under which snow and ice remain as late as July.

On our first visit we were unwittingly deceived by our volunteer guide who declared confidently that we would not need the rope we had in the car to negotiate the cave. But we did need it, for we got only far enough inside through a tight lemon-squeezer passage to look down into the first chamber, twenty feet below, and make out in its floor a hole leading farther down. Three years after our initial defeat we visited the cave again, this time equipped with 200 feet of stout rope and a sledge hammer. We anchored our rope to a boulder, placed a slippery pole for it to run over, and then discovered we’d carried the sledge hammer in vain—someone had enlarged the lemon squeezer. Even so, it took half an hour for ten of us to rope down to the bottom.

Water dribbled over marble and limestone, and the smooth walls offered few footholds. At the very bottom of this ice-cold cave we found a chamber perhaps 35 feet in height, and in it a formation of water-carved rock resembling an old-time pulpit. It was, of course, the Devil’s Pulpit, and devilishly cold. Despite our heavy, warm
clothing we had no desire to linger long in this subterranean refrigerator.

One of the most impressive caves is near the top of Dorset Mountain, otherwise known under the classic name of Mount Aeolus. Thanks to the once-flourishing marble quarrying on the mountain good trails lead right to this cave, at an altitude of some 2500 feet. My guide to this cave was Donald R. Griffin, Harvard biologist whose work on the mechanism of obstacle avoidance by bats flying in total darkness has since become well known. Loaded down with paraphernalia for catching and banding bats we left the highway, splashing our way across watery meadows. About halfway up the slope we encountered snow, and before long we were wading knee-deep in it. We arrived at the cave gasping and exhausted, but the picture that awaited us was alone worth the climb.

To the east, from a ledge where white marble was quarried near the cave entrance there is a view across for, hibernating in clusters on the ceiling. A few were dead, apparently from exposure to low temperature, for bats cannot long withstand freezing temperatures, and this cave is one of the coldest in the state in winter because of its wide entrance.

The Chin on Mt. Mansfield is described by Zaddock Thompson, the historian, as a “weird rock formation which has a regular cave mouth, but terribly twisted, yawning and awful, with a breath that strikes a blight like that of winter. A hundred feet overhead trembles a vast rock of tons weight which seems at each moment as if just ready to fall. Yet it has probably hung there for thousands of years.” Someone has well named this the Rock of Terror, but Roger Johnson of South Hadley, Massachusetts, one of New England’s earliest and most energetic spelunkers, descended to a point 200 feet inside and 60 feet down, where he left a glass jar with his name and address inside. The fact that nobody has written to him, as he requested finders to do, suggests that this is no tourist cave. And for good reason: the cave is dangerous. Because of ice it can be entered only after about the first of July.

Another ice cave, but not so dangerous, is the Ice Cave at Pittsford. It is a talus type of cave, that is, one formed by the piling together of huge masses of rock. A rope is useful in descending the 75 feet to the bottom, where ice remains throughout the summer.

Not far from the Pittsford Ice Cave is the Bat Cave or Nickwacket Cave on Mount Chaffee, just over the line in Chittenden. There are three entrances, two of them just large enough for a person to squeeze through, the third a wide, moss-grown tunnel that abruptly shrinks to proportions barely enough for one to scrape through. A few years ago Arthur W. Foote of Rutland and his brother

NOTE: The author would like to hear from readers about other Vermont caves. Mr. Perry should be addressed at 109 Wendell Avenue, Pittsfield, Mass.
Leroy W. Foote of Middlebury, Connecticut, discovered a cavelet nearby into which a brook disappears. Within this little cavern were crystals of limonite, a form of bog iron ore.

Between Plymouth Union and West Bridgewater lie the Plymouth Caves. There are three of them, close together, and easily reached from the highway. There are half a dozen connecting rooms, up to 60 feet in length, with some stalactitic formations. However, since their discovery in 1818 by Zaddock Thompson many of the formations have been damaged or removed by collectors.

Deer Leap Cave at Sherburne Pass, opposite the Long Trail Lodge, is not a solution cave, like those in calcareous formations; it is in gneiss. However its pits are deep, dark and difficult for the most adventurous, especially if visited on a windy, rainy night as our exploring party did. One of our members was missing for some while, and we feared that he, like the legendary deer that gave the cave its name, had fallen into one of the pits.

Don’t plan on seeing Indian Cave (at Carver Falls near Fair Haven on the Poultney River), unless you are willing to get soaked, for the entrance, actually just over the border in New York, is behind a waterfall. It is, however, one of the most beautiful caverns in the area. The opening, raised some 18 inches above the river, is about eight feet high and five or six feet wide. The first chamber extends 20 or 30 feet, ending in a small hole solidly packed with clay. About halfway in, on the side toward the stream, which forms the state boundary, is a tremendous pot-hole about ten feet in diameter. By crawling down into this a short distance you can reach a chamber that parallels the one at the entrance. Beneath this passageway, which extends 30 or 40 feet in each direction, running water can be heard. This cave was known to the Indians, as proved by relics recovered in it.

The foregoing can serve only as an introduction to the caves of Vermont. None is large, but most of them are worth the effort to locate if you find enjoyment in exploring the last American frontier—its underworld. In “New England’s Buried Treasure” I have listed some 35 true caves, several old quarries and old mines, and described most of them. There must be three or four times as many caves in the state that I have not heard about. All you have to do to get started as a cave explorer is to ask people about caves. You’ll find that hunters and farmers are pretty good in giving you clues. But don’t take any of them too literally. Maybe you’ll have a number of wild goose chases before you reach your first real cave. But if you’re the kind that enjoys cave exploring, you’ll probably enjoy running down even the worthless clues. After all, you’re pretty apt to be seeing some interesting country, even if it is the top-side and not the bottom-side of the state.

NOTE: The author and editors wish to thank Professor Harold B. Hitchcock, Middlebury College, for his help in the preparation of this article.

1 Published by Stephen Daye Press, 1946.
AGAIN Vermont Life is pleased to present the winning photographs of the Second Annual Vermont Life awards, made with the Fifth Vermont Photographers’ Exhibition of the Southern Vermont Art Center.

Reproduced here are the Vermont Life Medal Award photographs, three in color and three in black and white, as well as the Honorable Mention photograph in the black and white class. We regret that Honorable Mention citations in color by Alice Hobart of Rutland and by Eddie Potter of West Rutland could not be shown here.

Judges of the Vermont Life photography awards were John W. Doscher, FPSA, FRPS, of South Woodstock’s Country School of Photography; Samuel J. Hatfield, Burlington, long active with Vermont camera clubs; and Stephen Greene, West Dover, Vermont Life editorial associate.

Mrs. Charles Magnaghi of Brattleboro won double awards in the color division with her pictures of a typical sugar house and a view at E. Corinth. Third color winner was Robert Lind of No. Clarendon with his fawn picture.

In black and white, awards went to Charles Toms of Brattleboro, the Jenne farm in South Woodstock; Robert Bourdon of Stowe, at East Fairfield; and R. M. Brockway of South Dorset, Mt. Equinox from Sunderland.

Details on the coming Summer’s Exhibition at Manchester will be carried in our Summer issue. Entrants are asked to write now for details and entry blanks to Vermont Life, Montpelier, Vt.
Awards, 1955

Photographer's Paradise

My First Visitor
By Robert G. Lind

By Dolly Magnaghi

VERMONT LIFE MAGAZINE
AWARD FOR EXCELLENCE
Lift Up Thine Eyes
Unto The Hills
By R. M. Brockway

One Summer Day
By Robert Bourdo
(at right)
The Silver Lining
By Charles L. Toms
(at left)

Quiet Valley
By Newell Green
(Honorable Mention)
About this time of year, somewhere near March Meeting, fifty years ago, if you took down the receiver of the belt line telephone you would know a new season was opening. Instead of hearing the usual winter question “Got your dishes done?” you might hear “Begun your housecleaning yet?”

In the old days, for most of us who lived in the country, winter was more or less a denning up. Especially, back on hill farms, the older folks really went into hibernation. Even those of us who lived in the village found life decidedly restricted. Just the daily chores involved in keeping warm took time. Even the putting on and off of extra clothes was time consuming. That was especially true where households contained numerous children who had to be bundled up for the long walk or open ride to school.

When the first signs of spring spread a new light over the valley the promise of release was hailed with joy such as the coddled modern can never experience. Perhaps it was still winter when we hustled down the street to school that morning. But when we came out at noon we suddenly sensed the difference. With coat unbuttoned and waving our knitted toque we rushed, with the others who went home to dinner, shouting our way along the street. It was with difficulty that parental authority forced us to return to school still burdened with the habiliments of winter. Doubtless by night we were glad we’d obeyed. But something new had come into our lives.

Then came the time when it was warm even after school had let out for the day. Boys and girls going home on hill roads took delight in letting the water out of ruts with sticks or, we must report, digging new ditches with boot toes, or leading the stream from the burst dam onto a piece of bared grass beside the road. The brook which for so long had been a thread of trickling water between banks of ice, was fast becoming a raging roaring torrent. The children raced down the hill waving empty dinner pails and shouting. They felt something stirring within as the trees about them did—a rising of the sap.

Perhaps they raced through the gate into the yard of the farmhouse. Suddenly the atmosphere changed. The bleakness of winter chilled their souls as windows bereft of shades and curtains confronted them. What had been a living home seemed to have become a staring lifeless thing. They knew that soon feather beds and pillows would adorn those upstairs windows, and carpets to be beaten would await them on the clothes lines. In short it was housecleaning time.

Of course this epidemic took various forms. Sometimes it was violent. In thinking about those days it seems as though the orgy of housecleaning may have offered the same relief to grown-ups which the spring doses of sulphur and molasses were supposed to give to children, freeing them from the poisonous biles which the winter’s confinement had caused to accumulate. Perhaps those hell-bent orgies which broke out in some families were simply a releasing of adult distempers. Or psychoanalysis might suggest something else. In youth emotional fancies in spring did their double somersaults. Perhaps that upsetting condition of the cardiac region having been outgrown vestigial remains of it were channeled in new directions, one of them bursting forth into the wrecking of the usual household machinery.

The only habitable place was the kitchen where cold victuals were served to a distracted family by the lady of the house who went about with her head tied in a towel, her skirt pinned up behind, and wearing a look of steely crusading zeal which nothing could soften until the last atom of dirt was removed from the premises. Entering feet were inspected, and woe to any who left tracks!

We recall one woman, a widow living alone in an immaculate house. She always began housecleaning in March. She was one of the few whose house was steam heated. A comfort-loving husband had installed it. But
having been used to the discomfort due to stoves too early removed (before the forced intrusion of steam heat) the diligent widow let the furnace fire go out on a regular date no matter what the thermometer read. To insure it staying out, though ostensibly to keep the four lengths of connecting smoke pipe from rusting, she took the pipes down, wrapped them in newspapers, and carried them up three flights of stairs to the dry attic. There they stayed until several weeks of chilling, cold-catching temperature had been endured through the fall. Her fuel-saving determination could thwart any such discomforts.

Having assured herself of the dismembered furnace she disrupted every room to such an extent that the only place where one could sit down was the kitchen. Its stove provided the only heat during the month or six weeks that the rest of the house was like a barn. But the very absence of comfort seemed to provide her with a kind of conscious virtue. Other people were still keeping their fires going about as they had all winter! If our theory as to the need of some sort of purification being the cause of housecleaning mania is correct, it must have been obvious that a hard winter had been endured.

Nor was this case we have detailed so unusual even in households where families were thrown into a complete state of upheaval. Needless to say the Man of the House found out-of-door chores or frequent errands to town during this period, and among the children being kept after school was not looked upon with the customary feeling of remorse or anger.

Our family consisted of Father, Mother, and ourself, to say nothing of Old Tabby (who usually managed to supply additional felines, generally disposed of by gift or otherwise, with great regularity) never had to suffer from these aforementioned vicissitudes. Our mother was not held down by the calendar in her housecleaning. Since it for some years involved the removal of coal stoves, it was never undertaken until there was fair assurance of sufficient warmth for comfort from the kitchen stove. Then she did one room at a time. With the assistance of her two men (an altitude which we assumed with the gradual increase of responsibility wisely placed on our shoulders) following an early breakfast, the carpet, which might have been rid of its tacks the night before, was rolled up, taken out, given a good beating, on crusty snow if it happened to be available, and brought back and laid on fresh papers which mother had spread. Then we went to school and Father to his store. By supper time the tacking down was done, gradually more and more with our help. (It was really fun shoving the carpet with rubber shod feet, and getting it tight to the wall.) The evening meal was ready as usual, presided over by a mother looking as fresh and smiling as the newly cleaned room where everything was back in its orderly place. There were doubtless many other homes where the housecleaning bug had a like mild and not unpleasant bite—but no sting.

Sometimes when we walked “up-street” from the back of the big hotel, which came to life along in May, we’d hear a steady Boom—Boom. That would be the men who came every year from the Southland, beating the big carpets hung from stout lines with long poles. The beat was always rhythmic. Sometimes it would change with one group alternating and making the beat double quick. But always it was in time. Then on another day we’d hear the familiar notes of a Negro spiritual floating on the clean spring air. That would be these same men from the South washing the paint on the long sides of the hotel building. When they weren’t singing they were usually laughing. Their laughter made harmony too. Even then we used to think of the difference in housecleaning atmosphere between that of these singing men and the stern do-it-or-die-look of the housecleaning mothers who certainly never offered harmonies to ease the stress of toil.

So, once again, we find ourselves lying on the warm board that covered the banking on the south side of the house, with eyes half shut, absorbing the first warm rays of the spring sun and remembering.
ANYONE DRIVING ALONG the back roads northwest of Putney sees signs pointing to “The Experiment.” Soon a foreign-looking house appears above on a sloping pasture. Snuggled against evergreens and maples, it instantly reminds one of the creamy stucco and half-timbered houses of Switzerland, Germany’s mountainous Bavaria, or the Austrian Tyrol. The wide eaves, and a balcony looking out on the rolling green hills, add to the illusion.

The house has a name: “Himmel.” And it is truly a heavenly spot for the headquarters of “The Experiment in International Living.” Built in 1939 as a home for Donald B. Watt, the founder and chairman of the Board of Trustees, its charming architecture, sturdy beams, painted interior panels, wrought iron items and fine travel trophies from all over the globe, exemplify delightfully the one-world credo of the project.

Indeed, a simple definition of The Experiment could be—“the idealistic concepts of one world conducted at a personal level.”

Far beyond the tourist’s trek to foreign lands or the many excellent exchange student plans, The Experiment’s prime feature is a “homestay.” Young Americans, and reciprocally, those from other countries live as members of the family in nations quite foreign to their own. There are several varieties to the program, but they all center around a homestay of at least a month.

In groups of ten, with a leader, Experimenters go abroad to communities where ten homes, carefully chosen, are ready to welcome them. Their temporary “parents” are citizens who are eager for better international understanding. Experimenters are neither privileged, nor paying guests. Immediately, they become another son or daughter.

The group leader of the ten is neither a chaperone nor a guide, but merely a friendly counselor if needed, who usually lives with his local co-leader. He (or she) is often a summer-free school teacher with knowledge and affection for the nation being visited, and a proven ability to get along with its people.

The leaders, both American and local, are on hand also for the second month of the foreign sojourn—the no less valuable and interesting interval spent in adventuring through the countryside. The new-found “brothers and sisters” of the community hike, cycle and hostel together. They live under variable conditions where everyone “must pull his own weight.” The unexpected little adventures, the talking to strangers, the sightseeing with native eyes, all help the Experimenters to learn at first hand “what makes a country tick.” A final week is usually spent in the host nation’s capital city.

This year sixty groups—or 600 young Americans—visited in twenty-one nations. Conversely, 200 young people from fourteen other nations visited in homes in the United States. The difficulties of foreign exchange, and the generally lesser affluence of Europeans limits efforts to finance their young people on a reciprocal Experiment.

“Yet the benefits are reciprocal all the way through,” explains enthusiastic Robert Huffman, the public relations official for The Experiment. “The families who so generously receive the Experimenters, whether in America or a foreign land, learn a great deal from their guests. Language, customs, ideas and the habits of everyday living are freely exchanged. And it is reality, rather than theory or ideas gleaned from reading or the movies.”

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Above: Donald B. Watt, founder of The Experiment in International Living.

Right Above: U.S. center of The Experiment is this rustic Putney house.

Opposite: French students meeting last summer at the Woodstock home of Mrs. Abner Kodes. Mrs. Curt Hinkle, second from left was community chairman.

Runic device, shown beside title above, is used to identify The Experiment. It dates from a prehistoric period, stands for infinity and also symbolizes people living happily together.
Who are the Experimenters, and whence do they come? Applicants may be those who have heard about the program, or those who are recommended by the many affiliated universities and internationally-minded organizations.

There are several major requirements for candidates: the age limit of 16 to 30, a good academic record, participation in civic or extra-curricular affairs, a genuine interest in working for better international understanding, a proven ability to adjust to group living, personal stability, and open-mindedness.

Facility in a foreign language is naturally a great asset in any country, and there are certain groups requiring the native tongue which go to Austria, France, Germany, Italy, Mexico, and Spain. Yet as The Experiment broadens its scope, (and English-speaking, qualified families are found in far-away nations), the lack of a language need be no real barrier. This year, English-speaking groups are going to Austria, Denmark, Finland, Germany, Greece, Holland, India, Italy, Japan, Norway, Sweden, Switzerland, Turkey, Yugoslavia, and of course, to the British Isles.

Obviously, homestays in the lesser-known-language nations soon bring a working knowledge of the strange tongue, plus the reciprocal teaching of some English to the hosts and their families.

Since 1948, an ever-growing group of Experimenters has come from the Community Ambassador Project, initiated by the New York State Bureau of Adult Education, in cooperation with The Experiment. This Project has expanded considerably in recent years, due to administrative grants made by the Ford Foundation.

The community involved may be a small town, or a large metropolis like Schenectady, N. Y. To date, this city has sent eleven Community Ambassadors to represent them in England, Finland, France, Germany, Italy, Mexico, Spain, Sweden, Turkey and Yugoslavia.

Individuals set an Ambassador Project in motion, and arouse the interest of citizens in obtaining the necessary financial support. Often the sponsorship starts with one organization.

When the workings of the Community Ambassador Project become common knowledge, everyone “gets into the act.” Before long, representatives of many civic groups make up the central committee. For instance, Coffeyville, Kansas, had a total of 49 contributors. They ranged from individuals and a $1.00 gift from the G.A.R., on up to $100.00 from the Lions Club. The average cost of financing a Community Ambassador to most European countries is around $750.

In the earlier stages of the Experiment, Community Ambassadors were largely

By Barbara B. Walker

Orton

Hanson Carroll
residents of the East. Nowadays, they come from as far afield as Ohio, Tennessee, Texas and Oregon.

When it comes to the selection of the Community Ambassadors, publicity continues to play an imperative part. The more applicants, the better chance of a superior candidate. The application forms are published, distributed among students, clubs and churches, and advertised all over the town.

An essential is that candidates are able to express themselves well in writing and orally. During the sojourn abroad, they are required to write regularly of their experiences to their home town newspapers. Even more vital, after their return they must be available for talks and lectures, and thus continue to broaden the base of The Experiment.

The Selection Committee, representatives of the community's various groups, selects five to ten finalists. They are interviewed individually, and are often asked to give a short talk on why they think they would make a good Community Ambassador. Those who pass have their applications submitted to The Experiment Office in Putney. The latter's more than twenty years' experience aids the community committee. After Putney's recommendations have been made, applications are returned to the community for the final selection.

Then comes the all important briefing of the winner. He or she must be able to tell the story of his own community abroad, and be well informed about the United States as a whole.

Briefing sessions begin locally. The Ambassadors are taken through business offices, industrial plants, and all places of economic, historical and political importance. They visit newspaper editors, police chiefs, the mayor or governor, and so forth. Often, in their "diplomatic pouch," they carry pictures and brochures of their community, and letters to the "opposite number" of officials in European towns where they will spend their homestay.

Yet it is not the gestures which are important; rather, the attitude and conduct of individual Community Ambassadors. They must not try to "sell" America and our way of life as "the best in the world," be it plumbing or plentitude. But perhaps they can quietly correct erroneous ideas. And most of all, they can show, and learn at the same time, that in spite of superficial differences, human beings are much the same everywhere.

Vermont communities such as Burlington and Brattleboro have participated in The Experiment program by sending Community Ambassadors. With Woodstock and Cabot they also have provided homestays for incoming Experiment groups from abroad.

We asked Mr. Huffman: why—if the general program has been carried forward so successfully for more than two decades, and with a total of more than 7,000 Experimenters having been sent for homestays—is it still called "The Experiment?"

"Because each project, each person, each family and each community—is just that!" he replied. "We want to continue to spread the idea as widely as possible, to expose more and more people and nations to it. We can't guarantee complete satisfaction. We do try to arrange each homestay as a perfect set-up, yet when individuals go into a home, they're on their own." Incidentally, failures are infinitesimal.

Briefing, by general discussion, continues en route to Europe. Little things may be involved, such as "don't leave your hosts' lights burning," "don't expect constant hot water," or "if the young people wash the dishes and chop wood, you do likewise." There is advice on answering the kind of questions Americans often are asked: "Does everyone have a motor car?" "Are there Indians near your city?" "What about your Negro problem?"

Tolerance and universal ideas are the keynote of the discussions; whether on racial, religious or political topics. Talks are primarily held to start the young ambassadors thinking, to enable them to formulate their own ideas and answers.
Putney is the U. S. Headquarters of the international program; each country participating now has its own national office and director. This office selects suitable families for the Americans' homestays, and increasingly sends its own Experimenters to the United States.

France, which is visited by about 15 American groups each year, has a full-time paid staff and office in Paris. There are also permanent offices in Austria, Germany, Great Britain, Holland, Mexico, Switzerland and Sweden. Trustees often include those who have been Experiment "parents" and alumni. There are also National Representatives in Denmark, Finland, India, Italy, Norway, Spain and Turkey.

Although few of these officials have been to America, "Putney" is a well-known place to them, and automatically means "The Experiment in International Living." Thus the tranquil Vermont community, although thousands of miles away, has truly become a neighboring town.

And thus these neighbors across the sea set about finding new communities, and ten new families, who will take ten young Americans into their homes.

"No attempts are made to fit square pegs into square holes," Mr. Huffman explained. "The best we can do is to try and find families with young people of an age comparable to that of our Experimenters. For instance, Denmark is 90 per cent Protestant. If a Catholic or Jewish youth wants to go to that country, he knows he will probably be in a Protestant home.

A Scottish Experimenter

Looks at Vermont

My introduction to Vermont was by jeep. When I arrived, it met me at White River Junction to take me to my homestay in Woodstock. From then on we were constant companions. We went together to tennis and to the swimming pool; it took me to self-help stores; it shattered national barriers by its joggling progress as we talked—and sang—and even tried to write letters.

When I said "homestay," I meant just that—a stay in a home, "en famille" as the French say. And like all the Vermont families I knew, the family to which I belong—yes, still belong—loved Vermont and thought it worth showing off. So together we shot the rapids, worked and worshipped, fazed and gazed until the evening came and we saw the landscape fade from sight in the glory of the autumn sunsets. I remember visits to two youth camps where we saw American youth being moulded and educated in the perfect Vermont environment. I remember the fascinating covered bridges, the miles of "dirt road," the state highways. And to justify the British idea of America as having everything bigger and better than elsewhere, hurry-

Austrian Experimenters, later going to scattered American universities on Fulbright scholarships, spent their homestays in Burlington. At the University of Vermont Dean of Admissions Robert Kroepisch showed the organization under which most U. S. universities operate.

Eldred-UVM
The Experiment has no racial or religious affiliations."

Similarly, attempts to pair people of the same "social strata" are taboo. Last summer in Italy an Experimenter was placed in an affluent family, with servants, swimming pool and other luxuries. The other nine Experimenters in the area were living in homes of relative simplicity, including that of a cobbler. Normally, the cobbler’s children would never know socially the young people of the villa.

But because of the requisite group activities, whereby all the American Experimenters, with their native "brothers and sisters" and respective leaders, met frequently for parties and other activities, inadvertently there was a democratizing influence for everyone.

Politics, international tensions and criticism of the differences between nations are soon forgotten during the homestays. All reports indicate it is the people who matter most.

Understanding, and finding the common denominator in human beings, is amplified even more in the Experimenters’ second month; the seeing of a country through the eyes of its inhabitants with whom they are travelling. By now, there is little desire for the Americans to clique together and talk about home.

Paradoxically, the cliquing of Americans in Europe was the original reason for founding The Experiment in International Living. In 1931, the Paine fund of New York sent founder Mr. Watt and two other Americans to Geneva to observe international government problems. Young people from many nations were also there. But in spite of the broad scope of topics, each national group lived and played by itself. Why not mix them up, Mr. Watt asked himself?

The following summer, he organized the first Experiment—a group of American, French and German youths camping together. It sounded fine. But soon national cliques evolved. Clearly, an international camp was not the best place to learn how other peoples live and think. Thus the “homestay” idea was born: a month of living in foreign homes with young folks of the same age, followed by a month of travelling together. It was a success.

The ripples of this “pebble-in-the-pool” widened rapidly. In 1936, former Experimenters held a reunion. Their enthusiastic suggestions helped to expand the program even more. In 1947, they formed an official alumni organization, the Experimenters’ Association. A year later, the Community Ambassador Project was born, initiated by the New York State Bureau of Adult Education.


Yet the heart of the whole enterprise remains in Putney. The United States headquarters is directed by Gordon Boyce, in cooperation with the U.S. Board of Trustees, and a permanent staff of more than twenty-five. Finances come from a percentage of the fees paid by American Experimenters, foundation grants, government contracts and gifts. An endowment fund, now nearly $100,000, is being built up.

This year, 140 young people from Europe came to America for homestays, a two weeks’ sojourn at a University, followed by a week or two of travel. An additional 80 foreign students, winners of Fulbright and other scholarships, had a month’s homestay before starting campus life. Communities in Connecticut, Kansas, Michigan, Illinois, New Jersey, New Hampshire, New York, Maryland, Massachusetts, Pennsylvania and Vermont played host to those from the far corners of the earth.

"Experimenters make their contribution toward bridging the gap between nations, and changing false impressions that long have divided people of the world," is the way authorities express it. But let one of them speak for himself:

"By singing, dancing, arguing and planning activities together, we don’t have to worry about intricate theories on international understanding. We are making friends and having a good time."

END
The Steeple Enigma

Is it a pineapple or a jug perched atop this North Thetford church?

Pictured & told by
COLLAMER M. ABBOTT

OUTWARDLY North Thetford is a quiet, unassuming village with one street and a "typical" church steeple. But, things are not always what they seem. Quiet, unassuming North Thetford harbors a curiosity.

This curiosity perches atop the church steeple. It is an enigmatic object, being neither a weather vane nor a lightning rod nor any other object that conventionally graces the tops of Vermont church steeples.

At first glance this object appears to be an acorn, but it also has the look of a pineapple. Then, too, it could be—of all things—a jug. Further study only befuddles the sightseer more thoroughly. For a time he may lean to the jug theory. Then, because of the leaf-like ornamentation at the base of the object, he sways to the pineapple hypothesis. But those leaves might be the shell of an acorn cut into pieces for artistic purposes.

If curiosity leads to interrogation, the visitor will learn that the mysterious object is a pineapple and represents friendship and hospitality. That settles that, says the visitor . . . but

As he takes one final look to engrave the "pineapple" firmly in his memory, the shadow of doubt deepens. Distance blurs his vision. Only the bold outline remains.

If it were a jug—irreverent as the thought may be—it could still symbolize friendship and hospitality, he mumbles to himself.

END
When a speculator named Barber sold, at Civil War prices, the disordered clump of buildings and farm land east of the Winooski River to Lorenzo Dow Whitcomb of Essex Junction, he reckoned without that family’s Yankee perspicacity.

For today, 89 years later, the river bottom farm has developed into a 640-acre operation comprising five profit-making ventures guided by the restless but forceful hand of Lorenzo’s grandson, Robert.

But success did not come easily for this slight, wiry man with the twinkle in his eye who is as much at home behind the reins of a sulky at Saratoga as he is behind the milking machine.

Flood and fire—the two prickliest thorns in the side of a farm operation—had their chance at the Whitcomb’s. The 1927 deluge cost the family $20,000. Nineteen years later flames destroyed their 2,000 bushels of oats.

Mrs. Whitcomb, a pleasant woman, has equipped the comfortable 11-room farm home with a combination of labor-saving devices and antiques she has collected at auctions around Vermont. She remembers, too, the time when the bill collector came for a mattress the same day a visiting friend was sleeping on it.

Those were the days, too, shortly after their marriage in 1929, when the couple was living on a salary of $18 a week and paying for a new refrigerator by going trapping, shooting skunks and raising poultry.

Now, with the Whitcombs’ two sons, Edward, 19, a University of Vermont freshman, and Robert Jr., 15, ready to take over the management with the assistance of a loyal crew of hired hands, some observers might call Whitcomb a “gentleman farmer.”
Three generations of progressive farmers have built this big and successful operation upon widely diversified specialties.

Dairy cattle, these Holsteins, are farm's mainstay. Less typical is harvest of 225 tons of sweet corn, above, and potatoes, below left, on another 20 acres. Logging 200 acres of woodland, below, is sideline.
The family usually is together only for dinner at night. Here, minus daughter Liz, Mrs. Whitcomb pours coffee for her husband, while Robbie and Edward test her famous apple pie.

But take a tour through the farm. You will find the peripatetic, versatile Mr. Whitcomb, usually clad in sun-tans, putting his nimble fingers to work adjusting a stub­born piece of machinery, or out on the cornfields running the picker for a sick hired hand.

“He’s up at 5:30 milking the cows,” Mrs. Whitcomb will testify, “and he knows every one of them by name. He does all the farm’s bookwork, tunes the office with an intercom system to the barns. He even goes to Saratoga once or twice a week in the summer for the races. Many times he drives the three pacers and trotter himself.

“With him,” she said, “it’s a question of working all day Sunday to make things go right on Monday.”

Modestly, but with his New England practicality showing through, Whitcomb will explain it this way:

“If a man loves his farm land, he’ll keep it up without governmental help. If he owns the land and pays taxes on it, he should keep feeding it so that it will produce good crops.” The Whitcomb farm was diversified long before the Extension men began to stress that angle.

Through a spark of inventiveness inherited from his uncle, James Whitcomb, and the quality of leadership of his father, Edward Whitcomb, Robert has produced a dairy herd which averages better than a ton a day, a sweet corn crop which for 55 years has been absorbed by a canning factory in Essex, a 20-acre potato-growing operation, a lumber business which was created through his desire to clear the farm of fire hazard, and, his latest venture, raising and training colts for racing.

But the ambitious and comparatively young farmer of 40-odd years still has some ideas to carry out. With such success in only a few years with his four horses, Robert Whitcomb now would like to breed them.

“Horse raising has become a hobby I can pursue right on the farm and still keep as an investment,” he said, “but in order to establish a name as a trainer, you have to race. And because Saratoga is only a half hour away by plane and one of the cleanest tracks (in respect to rules), I’ve brought my horses there for the last two years.

“Last year Morton W. won seven out of fifteen starts, and Kay W. and Billy Fingo both had wins.” The Whitcomb’s horses all are named after members of the family.
Even as a boy, when he went to the Champlain Valley Fair with his father, young Robert would sit in the stands just itching to get in the race or at least to have a horse of his own. "Someday . . ." he would say.

"He treats a horse like a person," Mrs. Whitcomb smiles. "He reads up on them and knows all about horse psychology. He says every horse is different and has to be handled differently."

The largest operation on the Whitcomb farm—as far as dollars and cents go—is the dairy. The farm has about 200 head of Holstein cattle, with 90 or more milking, supplying the Milton Co-operative Creamery, of which Whitcomb is a director and treasurer.

His dairy operation is among the largest in the state and, in 1954, netted 791,876 pounds, averaging over a ton a day.

Closely tied in with his dairy operation is the 60-acre sweet corn crop. In fact, Whitcomb says "one wouldn't be much without the other." The stem and stalk which remain after the picker rips through the fields for the golden ears of corn, are scooped up by the forage harvester and used to feed the cattle.

Growing sweet corn was one of Whitcomb's pet projects. But actual picking and hauling it from the fields in baskets was too time-consuming.

And so, after years of careful observing and calculating, he put his engineering experience to work and came up with "Whitcomb's Folly"—a four-foot wide canvas belt which aided picking corn from the stalks after it had been cut in the field. He had majored in engineering at UVM.

It was during the war years, when help was hard to come by. The belt idea could employ women, who would not otherwise work in the fields. When corn harvesting time came around that first fall, eight persons stood at the sides of the belt and picked the corn. The ears were dropped into a hopper and then into a truck to be carried to the factory.

The machine eliminated field picking and speeded up work. This system continued for five years—until Whitcomb grew restless and sought another device for easing the pesky business of corn picking.

More observation—this time including a trip to Maryland—more calculation ensued. Mrs. Whitcomb will say it was Uncle Jim's love of invention, supplemented with the college training Robert had been the first in his family to receive. Result: the purchase of the first sweet corn picker in the state. Whitcomb was taking a chance, for the picker was still in the experimental stage. But it worked.

The picker rips along the fields, pulling ears off, yet

The comfortable brick house is one of the few old fashioned elements of the Whitcomb farm.

The haying season finds everyone, including the Whitcomb boys, working in the fields.

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not injuring the stalk. Last year was Whitcomb’s fourth season with the picker, which helps to gross more than $5,000 yearly from the corn crop.

As one man drives the picker through the rows, four snapping rolls gather the corn into two separate channels. The rolls, ribbed of iron, working like washing machine rolls, pull the corn on a 45-degree angle into two plates which are adjusted so that the ear won’t fall back down into the ground. A flight chain carries several ears at a time into the hopper to the wagon loader and over to the adjustable truck loader. Another man is driving alongside the picker in a truck, and as the loader swings the ear into the air, it lands on the back of the truck. When the truck is filled, the corn is whisked away to the factory.

Whitcomb harvested 255 tons of corn last year, which paid an average of $10.50 a ton.

Of the 640 acres which comprise six separate farms, 400 acres are tillable, including all the pastures. Although this is unusual in Vermont, Whitcomb has made it so through a planned program of yearly cleaning some of the ditches crisscrossing the fields. Twenty acres are in potatoes, which are sold in Burlington, Winooski and Essex.

Still to be considered are the 200 acres of woodland which Whitcomb has turned into a business.

“My father and grandfather never did anything with that section of woodland which borders the farm and, after all, it’s an operation that takes place maybe twice in a lifetime,” he said. “In case of fire, it wouldn’t take a minute before the whole woods, and the housing development which backs up to it, would go up in smoke. So, I’m selling off, on the stump, that side on the timberland.”

Whitcomb has six regular help, besides his two sons who work summers and week ends, and the extras he hires during haying and harvesting. For his six men he has supplied homes, some produce and heating.

One of his most able employees is Mose Valyou, who
has worked on the farm since 1929, and whose father was there before him. Stanley Winship, who ‘looks after things,’ is another. But it is Ray Fonda who has charge of the horses. ‘He babied them until they were broken in properly,’ Whitcomb says.

The snow has begun to melt now on the Whitcomb farm and is trickling down in streams to the river. Soon, the muddy brown earth will appear and not long after that, the first blade of grass will poke its way through. The smell of spring will be everywhere.

Machinery which was oiled and stored in the barns all winter long will be nosed out of doors and set in motion in preparation for the busiest of seasons, summer. Manure will be spread and it won’t be long before the planters bring seed to the earth.

And, during April and May, there will be a rainy season. “You know,” Whitcomb said, making a list of things to be mended and fixed, “the busiest day on a farm is a rainy one. You can’t plant corn then, you have to stay inside and find six different jobs for the six hired men.”

In the spring, too, the Whitcomb’s daughter, Liz—a striking, lissome blonde who walked off with nearly every beauty contest at UVM—has a vacation from her work as an airline stewardess. She will be the one who takes her namesake horse out on the track on the farm property, giving her an early run “to get the spunk out of her,” because early in June her dad will be off to the races.

By summertime, when the potato blossoms are white and full in the fields and the corn is half as high as an elephant’s eye, Robert Whitcomb will stand on a hillside and see the results of the seed planted originally by grandfather Lorenzo back in Civil War days.

And he should feel justly proud. But, being the man he is, he won’t be content to leave it that way. There will be bigger and better crops and faster and more efficient ways to make them so.

In years to come his sons will stand beside him, carrying the farm through the fourth generation.

“Oh, they may not want to at first. They’ll want to strike out for the West the minute they finish school,” Whitcomb shrugs.

“But they’ll be back. It happened the same way with both my father and uncle. After grandfather died and the farm went to them, they rented it out and went West. But as soon as they reached the coast, they came back on the double, they were so homesick.”

“It’s one way of keeping them down on the farm,” he grins.

And, judging from the Whitcomb end products, it might be the best way.
Roy Sheldon, ex-sculptor from New York City, artist, world-traveler and chef extraordinary, came to Vermont to teach at Marlboro College but soon quit to live off the land. It is his belief that anyone who can’t make a living in Vermont just hasn’t investigated its natural resources.

Sheldon proves his point by making use of practically everything nobody else has a use for nowadays, reviving in some instances long-forgotten crafts of early Vermont settlers. Soapstone, for example, used to go into the making of stoves and foot warmers but when these articles went out of fashion there wasn’t much use for soapstone. Sheldon finds it an ideal art material. Soapstone can be sawed, drilled, sanded, sculp-

tured and will take a polish. He makes unique soapstone ash trays, some weighing as much as twenty-five pounds, and finds a ready sale for them.

And then there is kaolin which Sheldon mines in nearby Bennington. He calls it the best pottery material in the United States, if not in the world. “Everywhere you walk,” he says, “you can find some neglected natural resource; you have to learn to get the most out of it.”
One of the many unique items this Marlboro craftsman makes from native materials which most people have thrown away or forgotten.

Sheldon compares beginning and end products. Below is a typical table. An industrial designer who "does crafts only to make a subsistence—so he can sculpt," he wrote "Consumer Engineering" and "Fun with Flowers," is now writing "How to Live on Nothing a Year."

Sheldon's technique for "getting the most out of it" can best be understood by observing what he does with apples from run-out apple trees along the roadside. He makes cider from them, which is in itself not too unusual. He sells it outside his craft barn in Marlboro, "all you can drink for ten cents." When it gets so strong Vermonters won't drink it . . . which is plenty strong . . . he sells it for vinegar. During the winter months he keeps a vat of cider boiling on the wood stove that heats his living quarters. The cider evaporates eventually to a potent boiled apple jelly. About twenty-two pounds of apples make one small jar of jelly.

"It is practically indestructible," says Sheldon; "insects won't touch it and it won't spoil even if it isn't sealed." He tells of one family that went to Europe for six months, leaving an open jar of boiled apple jelly on the kitchen

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Table top boards would make most lumbermen shudder. Center Below Sheldon bores leg holes and removes bark from a small one. At Bottom the top side is sanded smooth.

When they returned, the children started to eat the jelly and found it none the worse for wear. It's pretty hard to find that kind of durability these days. But Grandma knew about boiled apple jelly and used it in her mincemeat. Sheldon uses it in mincemeat himself... another instance where he has revived an old craft... and has convinced many people that mincemeat made with the jelly really stands up for itself.

But it is with Vermont's native woods that Sheldon has scored his biggest success. It started with paddle-shaped breadboards of birds-eye maple patterned after one he found in an old inn. He didn't have much trouble selling them, but birds-eye maple is a little hard to come by. Next it was revolving lazy susans. Now slab tables are the big item at Roy Sheldon's, with tops cut diagonally from logs of maple, birch, cherry and even pine, though Sheldon prefers the harder woods.

Sheldon likes to find logs that have lain on the ground for two or three years and have acquired just the right degree of dry rot. Sometimes they are trees blown down by the wind, sometimes logs left behind after lumbering operations. But the dry rot is important. It is caused by a fungus which penetrates the wood and in the finished table provides strange and beautiful patterns around the table edge ranging from black zig-zag lines to tiger stripes and leopard spots. These fungus spots are still hard in trees that have been down two to three years.

Large logs are not necessary. Due to the diagonal cut, logs eight to nine inches in diameter provide three-to-four-foot-long oval table tops. Sawing the log on the diagonal is a task many mill operators won't attempt. Sheldon has found a man who will cut logs on the diagonal for him, but won't let Sheldon watch him do it. That doesn't bother Sheldon, who is a respecter of professional trade secrets. The angle of the slice is important, and Sheldon has found that while a 45-degree cut will cause checking and cracking to an objectional degree, a 60-degree cut will not if the slab is properly dried.

He dries his slices for several weeks in an open shed where the air can circulate freely. He has found it best to leave the bark on the edges until after the drying and to paint the sides liberally with boiled linseed oil. (You can use plain crankcase oil if you want to save money, Sheldon advises.) The slices that haven't developed serious cracks...
can then be run through a planer until they are one-and-a-half to two-inches thick. Sheldon fills minor checks and cracks with a clear plastic and then a wood filler, and the table top is ready for sanding.

Next, holes must be bored for the insertion of the legs and Sheldon does it with a bit that goes into his power drill. He prefers to use turned wooden legs, glued in place, but says metal legs could be used if desired. The table tops are finished by being soaked in boiled linseed oil for several days until they have absorbed all the oil they will. The oil, Sheldon explains, penetrates the wood fibers, expands, and hardens. He has to use a scraper to remove the gummy excess from the surfaces, and he puts in plenty of hard work with sandpaper.

Table tops finished this way become silky with time and can be waxed like any other fine piece of furniture. Much of the labor of finishing these table tops can be avoided by using any of the tung-oil-and-plastic finishes available commercially, Sheldon advises, though he prefers the boiled linseed oil himself.

As fast as Sheldon finishes the tables they are displayed in front of the barn which houses his workshop and art center. He doesn’t have any high-powered sales philosophy. “If you live on a well-travelled road,” he says, “you can sell anything. Put it out where people can see it. Sooner or later someone will come along who wants it.”

That actually doesn’t cover the situation, because large New York department stores write to Sheldon unsolicited and try to buy the tables. He sells to them sometimes if he has the tables on hand but he doesn’t try to fill all the orders he gets. “You can’t mass-produce craft articles; if you try it you come up with something different, and inferior.”

Not only does Sheldon utilize Vermont resources in his handcrafts, but he tries to encourage others to do the same. He would like to increase Vermont’s production of handmade things. He tells of a little girl from a poor family who came to him with a stylized fish carved from soapstone. It delighted him by its honest simplicity. He encouraged the girl and put her in touch with a New York store which agreed to buy a number of the carvings. Anybody can do it, Sheldon believes. Vermont has lots of natural resources including timber enough to make quite a few tables.

END

Above linseed oil is rubbed into the completed tops, set in the sun to dry. Tapered legs (center) are turned on his shop lathe. Others (right) are fitted to finished tops.
“The record of Vermont as a resolute champion of individual freedom, as a true interpreter of our fundamental law, as a defender of religious faith, as an unselfish but independent and uncompromising commonwealth of liberty-loving patriots, is not only unsurpassed, but unmatched by any other state of the union.”

George Harvey, Ambassador to Great Britain, 1921