EDITOR'S UNEASY CHAIR

Cut short this issue we pass on a testimonial to Vermont's acknowledged superiority in agricultural products.

Clyde Perry of Barre reports on a trip in Maine he saw by a grocery this sign:

"VERMONT BUTTER"

Stopping, he spied in tiny type above:

"better than"

We wish to express belated thanks and give credit to Mr. William Gilman of Middleborough Springs for his material on the Fairdale Farms, which were featured in our last Spring issue and, in Mr. Gilman's article, earlier in The New England Homestead. When we wish to express belated thanks and give credit to Mr. William Gilman of Middleborough Springs for his material on the Fairdale Farms, which were featured in our last Spring issue and, in Mr. Gilman's article, earlier in The New England Homestead.

ABOUT THE COVER

Our cover shot of Jordan Atwood's Crescent Orchard in Orwell was taken last May by Arthur Griffin. The composition and color values show, we think, why Mr. Griffin is a nationally known color photographer.

The Atwood's 3,500 apple trees are mostly McIntosh. The 110-acre farm mainstay, though, is a 150-head Ayrshire herd. Cider? Some 5,000 gallons yearly.

"So many people have asked what Vermont Life's editorial force looks like that I have prevailed upon them to appear here as they were photographed in Montpelier last Fall while discussing plans for this issue. Left to right they are; Dr. Arthur Peach, Walter Hard, Jr., Vrest Orton and Ralph N. Hill, Jr."—Clifton R. Miskelly, Managing Dir., Devel. Comm.
COMING WITH THE SPRING.

Being most decidedly country-tied the Post Boy has often thought that there could be no keener delight than that experienced by one who had been city-bound all winter and then finds himself moving into the country on one of the first warm days of Spring. Oh yes, we know. But even the days when winter returns for a short season with all its March rawness, given a cheery fire and good companionship, knowing that it cannot last for long, there is joy in the very contrast.

Taking a long look back the P. B. remembers one especial occasion when he experienced one of those flashes of ecstatic joy brought on by the sudden inhalation of the air of spring in the country, after a winter far way from his native hearth.

SOUTHERN EXPOSURE.

The Post Boy had spent a winter in the snowless South. He had absorbed some of the leisurely charm of life in New Orleans before the turn of the century, not to be too definite. Here street cars rolled along through uncrowded streets drawn by well kept mules; cars which would stop and wait for no apparent reason. Then walking unhurriedly down a side street one would observe a woman. She had waved her parasol at the driver. She might well have been two blocks away. Arriving she would furl her gay sunshade and step aboard. The driver would start his motive power with a slap of the reins and a "giddyap there." If there were a gentleman aboard he would take the lady's fare and hand it through the door to the driver-conductor.

ON THE GULF.

The Post Boy had spent weeks on the Gulf in a cottage so airy that grasses and weeds poked up through the cracks in the floor. Here he and the rest of the family had been transported from the station in a vehicle with mismatched wheels, drawn by an ancient mule with a harness contrived of pieces of leather held together with yards of string and rope, and driven by a gray haired, patriarchal darkey, obviously proud of his outfit.

Your embryonic Post Boy had slipped out unbeknown and walked the unstable catwalk out—it seemed miles—to the fishing platform where he had gone previously held tightly by the parental hand. He had even gathered up a pole with some bait still on the hook. To his delight he soon found he had something on the line. To his horror he pulled up a fish the shape of an out-sized hot water bottle. It wriggled and had a wicked looking tail.

Luckily he refrained from any attempt to remove it from the hook. Instead he started to walk rapidly back along the unsteady catwalk. The rest is blotted from memory. Whether there was any punishment from horror stricken parents, especially his maternal ancestor who had a fear of water more than six inches deep, or whether joy at his safe return overcame disciplinary measures we know not. We do recall that the luckily untouched fish was called a "Stingaree." Later we learned it was an unpleasant and even dangerous bit of piscatorial life.

HOMEWARD BOUND.

There was the unprecedented trip in a sea-going boat from New Orleans to Charleston when for the first and only time the P.B. was the subject of discrimination. He was forced to sit on the stairs leading down to the dining saloon, with a lot of other children and sundy nursemaids, not being allowed to eat at the first table with the high and mighty adult passengers. The disappointment in finding we were not going through to New York, as most passengers were, was later mitigated when it was learned that the vessel encountered a terrific storm en route and even some of the cargo had to be jettisoned. We have since almost wished we could have had the experience but even the premonitions of a storm had upset to an unhappy extent the one who did not love the water.

THE METROPOLITAN MESS.

Then came the arrival at the Grand Central and the scramble to get aboard a cable car in the slosh and chill of New York's worst. Instead of the leisurely waiting for passengers was the harsh command "step up forward there" and the diminutive, embryonic P.B. found his skinny body compressed into still smaller quarters by the pressing throng.

COMES THE MOMENT.

Again aboard the train soon familiar sights and smells brought back hints of the life that had been interrupted months before. Above Troy more familiar hills ushered in the great moment which still remains outstanding and shining in all that year's strange proceedings. It came of all places, at Hoosiek Junction, N. Y. where the drab station and a much drabber "Junction House" were the only signs of human habitation. Here, as was the custom at many other junctions, another rail line took over, always so scheduled that waiting was synonymous with the word "junction." There the P.B. found himself alone when he went outside of the warm station. There was a still chilly wind but the sun was warm and the wind brought on it something—the thing—which made the unforgettable memory. The few people about did not hurry. There was no parental hand tightly grasping the small one in perpetual servitude. Then suddenly he knew. The other days had been more or less part of a dream. Here were the hills and the freedom and most of all, born on the wind, that indefinable something which was the joyous essence of Spring. He was coming home to meet it and suddenly all of the familiar joys of home which had been shoved into the background came back in a wave of overwhelming joy. All that and Spring too. He wanted to shout, he needed to run. He stood there just letting it glow inside.

The Post Boy hopes that this same feeling may to some extent come to each returning wanderer to the waiting hills as he joins the incoming Spring.

END
VSA - 200-ACRE CLASSROOM

Lofty in Purpose and Location, Vermont's Training Ground for Future Farmers teaches Modern Methods by Actual Practice

By Wes Herwig

Photography by Clifford Patch & the Author
ABOVE: Students at VSA enjoy a panoramic outlook. This view from Randolph Center, near the school, shows Randolph Village to the West in the valley below. Rugged Braintree Mountain forms a backdrop beyond. The Center was originally laid out to be Vermont's capital.

Whichever road you take, it's a long climb up to Randolph Center. But when you reach the top you know it's worth the trip. For the panorama of majestic mountains and peaceful valleys which spreads out like a magic carpet at your feet is satisfying to the soul. So, perhaps it is only natural that this little mountaintop community has been for 150 years, if you please, a center of learning; a place from which young people have gone out to all parts of the Green Mountain domain filled with vision and wisdom.

Yesterday it was young teachers; today it is young farmers who are learning life's lessons on the hilltop. It seems only fitting that this fountainhead of knowledge should now be occupied by Vermont's only State School of Agriculture. For what loftier undertaking can there be than that of advancing our greatest industry—agriculture—the cause to which VSA is dedicated?

There were many heavy hearts when the State announced its decision in 1910 to abandon the Randolph Normal School. It was a fairly young school, as educational institutions go—only 43 years old—but no school ever had a more loyal student body. When the agricultural school was established, later the same year, its students inherited the same spirit of hill-born loyalty, along with the school building. This was to be the third school on the same site, the Orange County Grammar School having been founded there in 1804.

The seed that sprouted into VSA was planted and nurtured by several members of the Farmer's Club at State Legislature, Timothy G. Bronson of Hardwick, Henry Lee Hatch of Strafford and George T. Chaffee of Rutland, being outstanding among them. They deplored the lack of opportunity for young people who wanted farm training but were unable to attend the Agricultural College. The rest of the Legislature—the bulk of which was farmers—had to agree. When Randolph Normal closed its doors, they acted quickly and by a special act on November 29, 1910, the seed matured.

Like many a Vermont farm, VSA had a very modest beginning. When the first Aggies climbed the hill in the brisk autumn air of 1911, they found no barn, workshops or cattle. The 65 acres of ground designated as the school farm, while being basically good soil, had long been run out. Students were housed in an old summer hotel which had definitely seen better days—days like the one when the Marquis de Lafayette was entertained within its walls almost a hundred years before.

VSA's "charter" students must all have graduated as master carpenters. During the first year they constructed a dairy barn, woodworking shop and chicken house. Their enthusiasm and rapid progress made a deep impression on the Legislature, however, and ensuing sessions appropriated the necessary—but reasonable—amounts needed for improvement and expansion. From there, the story is one of a long line of Vermont farm boys seeking out the hill road to the mecca that is VSA.

Today the modern plant of the State School of Agriculture embraces 15 substantial buildings, 100 purebred dairy cattle, 2500 fowl and 200 acres of rich, loamy soil, and is valued at $550,000. To enumerate the accomplishments of its graduates and place a valuation on the service VSA has rendered Vermont, would, however, be an impossibility.
A herd of 100 purebred Jerseys provides milk for school use. The boys under supervision do all the chores.

The shop classes keep school farm machinery in top condition and teach the boys maintenance and repairing techniques.

Dairy Instructor Hubert Lary checks a student’s testing of milk and cream, part of the School’s laboratory training.

Farm machinery changes every year. Here Agronomy Instructor Philip Hodgdon explains how a forage harvester works.

Poultry students learn from Instructor Franklin Rollins how to select breeding stock for better producing hens.

Most students later will raise their own meat. Perky Slack shows them how to cut up a beef quarter.

Students prune and spray the VSA apple trees. Here they are harvesting a fine crop, in part for VSA’s own tables.

The making of ice cream always is a popular activity with the dairy processing classes. Results should be tested.

Since its inception, more than 2000 young men have left “the hill,” diploma in hand, to take their places as farm operators, herders, poultrymen and dairy technicians, and to assume other roles in the complicated pattern of present-day agriculture. But most gratifying of all is the fact that over 80 per cent of these trained agriculturalists have remained in Vermont, going back into the rural communities from whence they came to spread the gospel of a more productive and profitable farm life.

While the school’s original objectives of building worthy citizens and providing practical training have remained adamant as Vermont’s granite hills, changing conditions have wrought continual adjustment in the courses. Where farm boys formerly learned the art of making butter boxes and how to select a sound farm team, their studies now include artificial insemination and electric welding. In the early years, most of the students came direct from the little white schoolhouses to enroll in the two-year course. Today the one-year men—high school graduates—are in the majority.

Administration of the school, originally vested in a board of trustees, has been by the State Board of Education since 1917.
The present principal is 41-year old Richard A. Young, a former teacher of vocational agriculture at Middlebury High School, who came to VSA in 1951. He is also superintendent of the school farm.

VSA has often referred to the school which “has done a lot with a little,” No one reading through an early catalogue would doubt this statement or that VSA had its origin at the hands of Yankees. A description of the shop course proclaims that “students are taught economy in turning whatever may be at hand to some useful purpose.”

The list of courses offered at VSA, where tuition has always been free to Vermont citizens, is impressive, considering that the faculty is limited to six instructors. Among major subjects from which students may choose are agricultural engineering, agronomy, animal husbandry, dairy industry, farm management, forestry, horticulture, farm economics and poultry science. Classes in farm machinery, milk testing, and co-operatives and marketing are popular. No phase of modern farming is left untouched.

Although the act which established VSA called for instruction in courses of “domestic science,” in addition to agricultural subjects, these have never been included in the curriculum. VSA has had co-eds, however, and three young women—one the daughter of a VSA-trained farmer—have qualified for diplomas.

As integral a part of the VSA program as text books and test tubes is the school farm. Classroom work is interspersed with application under actual conditions, and students must work 250 hours on the farm in the course of the school year. Besides providing on-the-job practice, the large outdoor laboratory supplies most of the foodstuffs which go into the typically farm-style meals served in the dining hall.

The VSA farm is not an experimental farm, adopting only methods which have proven practical. Always abreast of the times, the farm was a pioneer in using milking machines and was among the first to feed grass silage, a practice which is currently making revolutionary changes in the dietary habits of Vermont cows. The processing plant operated in conjunction with the farm dairy is equipped with pasteurizing and bottling equipment, butter churn, cheese vat and ice cream freezer.

Cows are the backbone of Vermont agriculture, so the VSA herd is rightly considered one of the school’s most important working tools. The herd was started in 1912 with the purchase of four registered Jersey cows. Under the trained eye of Stanley G. Judd, who was principal of VSA for 19 years, the herd was enlarged and improved, establishing enviable records of production. A goodly number of prosperous herds in the state today can trace their rising star back to a bull calf from one of VSA’s gold or silver medal cows by Intervale Medal Napoleon or Aggie’s Fauvic Owl, outstanding sires developed at the school.

Up until 1947 the VSA herd was composed wholly of descendants of the four original foundation cows. Then, as serious a blow as could be dealt an institution of its type befell VSA. The night of October 12 the extensive dairy barns were levelled by fire. Lost in the holocaust were twenty-one carefully selected female calves from some of New England’s finest breeding farms were donated to the State of Vermont in appreciation of the valuable service rendered by the School of Agriculture.

But if VSA has taken pains to maintain a good dairy, it has not neglected the other diverse features of the average Vermont farm, either. The poultry department—complete and up to the minute—is something to crow about. Hatchery practice, trapnesting, turkey and broiler raising, disease control and poultry dressing are all part of the work-and-learn program. The school’s birds have been consistent winners in the popular “Chick-
en of Tomorrow” contests. There are orchards and berries, a well-kept woodlot, a modern greenhouse and even several hives of bees. And when spring comes calling, the Aggies tap their own sugar bush of several hundred maples.

Field trips to nearby farms supplement the classroom study and school farm practice. These educational sightseeing tours allow the boys to observe the application and results of various scientific methods and to learn first-hand of problems peculiar to certain types of farm operation. The senior class makes an annual trip to Boston to view marketing in action.

Centrally located, the school has long been a popular site for state-wide gatherings of agricultural organizations. Conventions of state and county 4-H, Future Farmers and Farm Bureau groups are annual summertime events. Alumni of the Randolph Normal School return once a year for a reunion and VSA has its own homecoming day in the fall. The Vermont Jersey Parish Show and state Jersey and Guernsey sales have made frequent use of the spacious grounds. Chicken barbecues, today enjoying widespread popularity, had their Vermont origin at VSA.

One harvest which VSA has reaped down through the years is an abundant school spirit. Living, learning and working together—like one big farm family—the
boys make friendships and share experiences which are not soon forgotten. There is something about it all which makes a farm boy proud the rest of his life that he has known "the hill" as a second home.

Even though its scholars must don overalls and shoulder a share of the customary chores, VSA is not an "all work" school. There is a well-rounded athletic program with intramural and varsity teams in baseball, basketball and cross-country running. Randolph Center’s broad, tree-lined street, laid out in hopes of being the main avenue of the State Capital, resounds to lusty cheers for the Green and White when it is transformed into VSA’s track course. Sports competitions are held with several high schools and the state teachers colleges. “The hill” is a natural for skiing and the school operates its own ski tow. Highlighting the social calendar is the traditional VSA Minstrel Show, an outlet for the year’s crop of un­cultivated corn.

VSA has always been a friendly school with many friends. When the great flood of 1927 cut a swath of destruction down the White River Valley, Principal Judd volunteered the strong backs of his Aggies to help with reconstruction. The heavily damaged roadbed of the Central Vermont Railway at hard-hit River Curve in Brattleboro was rebuilt with VSA assistance.

VSA’s student body—normally 80 boys—constitutes about half the population of Randolph Center village, and by graduation time townsfolk and Aggies usually are well acquainted. The boys often work on local farms after school hours, assisting with planting and harvesting. It is not uncommon for VSA men to settle in the area, held there by the magnificent view—and a pretty hilltop bride.

Testimony that Vermont’s investment in agricultural education at VSA pays off is visible in every section of the state. Since the beginning of the Green Pastures contests several years ago, the list of county and state winners has read like a VSA alumni roster. Graduates are to be found among officers of the Farm Bureau and Grange, dairy herd improvement associations, artificial breeding groups and cooperative organizations. Many have gone into specialized services; county agents, teachers, fieldmen and researchers. But the largest percentage of VSA men have gone back to their home farms to become skillful farm operators and leaders in their communities. A number of father and son teams have VSA backgrounds, the son bringing home the latest techniques to supplement the earlier training of his Dad.

What about the boys who want to farm but have no farms to go home to? Each year finds several agriculturally-minded town and city boys at VSA.

Surprisingly enough there have even been Aggies from Flatbush, Brooklyn and Boston’s Back Bay. Such students are guided into positions which will provide more experience and from which they can work towards eventual ownership of their own farm enterprise. It’s not an easy row to hoe—the modern farm represents a large capital investment—but many VSA graduates are proving that it is possible.

Perhaps no greater reward can come to a man than to be able to look with pride and satisfaction upon the fruits of his labor. Today, as Commissioner of Agriculture for Vermont, former Principal Stanley Gaines Judd is enjoying that reward. To hundreds of graduates, Mr. Judd and VSA will always be inseparable. His boundless enthusiasm for VSA, his uplifting of its standards and standing and his unusual ability to understand boys—farm boys in particular—were enriching contributions to a flourishing chapter in the school’s history.

This then is the VSA story. It is not a story of fame and glory; no VSA man has achieved international recognition, nor has the hilltop school ever produced a millionaire. Instead, VSA has been content to send its roots deep into the Vermont soil; across the covered bridge to greener pastures, down the shady lane that leads to home.
At the Sign of the Quill

A Department of Literary Comment

By Arthur Wallace Peach

Bricks—Bouquets—And Poetry

A brick was tossed into my sanctum, not long ago, and tracing the brick to its source, I find it was heaved by my old friend and feudist, Vrest Orton, down among his molasses jugs in his Country Store in Weston. I refer to his piece in the Autumn issue of Vermont Life. The admonition to turn the other cheek, after being whacked on one, does not go farther, I have noticed, anatomically, and I propose to toss the brick back into the crockery.

My brick-heave-ho friend states that our Poetry Society of Vermont represents a "charming and ephemeral" cause. I have tried to involve him in it without success, as he says, with the result that he knows little if nothing about the Society and its work; hence, I doubt if he is in a position to describe it as "ephemeral." An opinion based upon no command of the facts is hardly worth discussing. As a matter of fact, the record of the Society shows that some of its members are contributing to national magazines, but more important, by all means, is the fact that its membership of around one hundred is finding in the study, reading, and writing of poetry new interest and wisdom that invariably follow the study of any fine creative art in a materialistic day.

More serious than his failure to grasp the intent and promise in the Poetry Society is his viewpoint as to such a society and his interpretation of poetry itself. Since his poetic soul may be beyond redemption, perhaps I can help others to see the way and the light.

"Poetry is something to be loved and communed with in silence and alone," says he; so we conclude that poets should not be organized. The experience of mankind shows that we share things worth while from pies to the stars. The grocers, the cattle-dealers, the plumbers, the bakers, the candle-stick makers get together, the artists, the musicians, and why not the poets? Drawing molasses with one hand and thinking at the same time is not a sound procedure, I submit; hence, a fallacy seeps into the thinking. The creative worker needs the friendliness and the shop-talk of those who work as he does. Birds of a feather, as the ages attest, tend to flock together—for good reasons.

The real difficulty is in Orton as a poet and as a judge of poetry. He did publish a poem in Moult's The Best Poems of 1929, a reputable volume. Vrest's poem deals with an old Vermonter whose wife had left him, but the old man kept the bedroom just as it was for years after her departure, even to the chamber-pot under the bed. I suggest that this symbol of love unchanging in line with the theme of the poem was the sole reason the Englishman, Moult, selected the poem: the pot was a new factor in literature at the time, a unique idea. Vrest was original, I admit, but no longer. In Eliot's The Wasteland, there is a reference which was interpreted by one American critic as meaning the sound of a chamber-pot, or, as we call it in Vermont, a "thunder-jug." Another eminent critic said the reference was to the song of a nightingale, and both critics, I assure you, were serious; and I can give exact quotations if necessary. The incident, by the way, is a good commentary on much "modernistic" poetry; when a reader cannot tell whether a poet is referring to a nightingale or a chamber-pot, something is wrong with the poet or the poetry.

Now, we find Vrest quoting with fervent phrases Edna St. Vincent Millay's poem beginning, "O World I cannot hold thee close enough." As far as I am concerned, I get more of the world than I want in my ears, hair, mind and about everywhere else daily. Such a poem is rhetorical emotionalism; and it goes back to Miss Millay's immortal poem in which she speaks of her candle burning at both ends and giving a "lovely light." Anyone who has ever tried burning a candle at both ends ends up with a headache or a tummyache—and neither one is "lovely." Her poems are for the romantic mind—and may their tribe live on though not increase! I agree with Branch Cabell that we cannot make dreams come true unless we maintain faith in them; and too many dreams are on the point of dying in this age—dreams of a better age, and so on. But the romantic mind has its limitations. Orton please note.

Let's look at a real poem by the greatest of American poets in the last half century—excluding the living:

Monadnock Through the Trees

Before there was in Egypt any sound
Of those who reared a more prodigious means
For the self-heavy sleep of kings and queens
Than hitherto had mocked the most renowned—
Unvisioned here and waiting to be found,
Alone, amid remote and older scenes,
You looked above ancestral evergreens
Before there were the first of us around.

And when the last of us, if we know how,
See farther from ourselves than we do now,
Assured with other sight than heretofore
That we have done our mortal best and worst—
Your calm will be thesame as when the first
Assyrians went howling south to war.

Monadnock, is, of course, a mountain in New Hampshire. The poet is Edwin Arlington Robinson, and the poem is taken from Collected Poems, Macmillan, 1925.

The Red Chinks are howling up Heartbreak Hill probably as I write, but we are seeing farther with "other sight than heretofore"; and the Monadocks of the human spirit will stand calm above the years when the last Chinks have gone "howling" into oblivion. The poem sym--
bolizes the resistless march of the human soul across the ages from the caveren's caves and jungles. Beneath the roar of traffic, the whine of machines, the clink of coin in the counting-houses, the still small voice of the true poet is still speaking, and it will be speaking when the roar dies, when the machines cease to whine, and when the dust gathers on the counters of the Vermont Country Store in Weston where a gifted writer, one of the best typographers and book designers in America, is lost among the molasses jugs. So has it been, so shall it be, from everlasting to everlasting. **Quien sabe?**

### Three Vermont Voices

Some day, some one will write a literary history of the state, for the simple reason that the true Vermont will never be found by the slide-rule methods of the economist and social historian. Rowland E. Robinson and Daniel L. Cady must be included in such a history because of the faithful rendering of the periods they covered. Our third writer would be Walter Hard. He makes vivid the life in Vermont which is just closing—the days of the buggy, the country store, the deeply individualized experience of the Vermont village. Some one else in the future must deal with the day of the radio, the television set, the tractor, the auto, and so on, which are slowly changing Vermont, even though the sound blood-strains of real Vermonter and those who are akin to them in thought and viewpoints change little with the decades.

I have been reading Hard’s *A Matter of Fifty Houses*, published by The Vermont Book Shop, Middlebury, Vermont, 1952, at $3. The format is most attractive—a vast improvement over that usually given books of verse by New York publishers. I hope my readers note this book shop, as I believe that here in Vermont while books, beautifully designed, outstanding in content, can be published and printed and sold—even if commercial houses in larger centers say that it cannot be done.

As for the verse in the book, all the poems have the characteristic Hard touch that just about defies analysis. Carl Sandburg states, “He and I are of the same school in believing that an anecdote of sufficient pith and portent is in essence a true poem. I treasure and reread his volumes.” There is a quality in Hard’s verse—if it is that—which certainly is not in Sandburg’s similar attempts. It seems to me to be, first, in Hard’s somewhat amazing grasp of detail in which he centers his characters. One can put one of the poems under a mental microscope to see what the mosaic is, and each bit of Vermont ma-
terial in the poem not only fits, but is true to fact. I think he writes as he reads the poems—and the technique certainly is his own gift. It is the poems, however, that really count.

The basis of each poem is a bit of human experience, pointed up in the last lines, but the skill is in the weaving of the poem up to that point. The people in the “fifty houses” are basically we, but the tang and tone are an older Vermont. For instance, “Timepiece” is the simple story of the auction of an old country doctor’s property and his old driver, now eighty-seven years old. The old man wishes to buy the doctor’s clock, and finally in anguish as the bids rose, he did manage to buy it. He put it on a carriage block and set the clock going and explains: “I’ve set and hered it strike many a night, Waiting for the Doctor t’ get his things ready,Whilst the wind was slappin’ the snow against th’ winder.”

Strickland Gillilan in the *Kansas City Star*

| Printed as a hint to all women now in the throngs of spring house cleaning: leave his den alone! A. W. P. |

<table>
<thead>
<tr>
<th>SHE TIDIED UP</th>
</tr>
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<tbody>
<tr>
<td>She tidied up my desk today—I cannot find my pen.</td>
</tr>
<tr>
<td>Not half an hour was I away From this my littered den.</td>
</tr>
<tr>
<td>Yet not among my papers here, Nor anywhere around</td>
</tr>
<tr>
<td>Is my old fountain-pen—I fear It never will be found!</td>
</tr>
<tr>
<td>She tidied up my desk for me—I ’ d laid my work all out</td>
</tr>
<tr>
<td>Just as I wanted it to be—</td>
</tr>
<tr>
<td>She thought things stewed about! And so she put my desk to rights</td>
</tr>
<tr>
<td>And redded up the floor—</td>
</tr>
<tr>
<td>My little gem called “Harbor Lights” Is gone forevermore.</td>
</tr>
</tbody>
</table>

| She came and tidied up my desk—Hers is the thoughtful heart. |
| It seems to her a thing grotesque, The way I ply my art; |
| Wherefore she came and tidied up, And now I sadly sing |
| The grief that overflows my cup— |
| I CAN’T FIND ANYTHING! |

“Yes, this old clock ticked the Doctor out And now I reckon mebbe it’ll tick me out too.”

He put it under his arm and started across the Green.

There you have the point of the buying of the clock, but the moving appeal in the poem lies in the texture of the preceding forty, slow-moving lines arranged on some instinctive (my guess) iambic pentameter base.

The range of themes is wide—humor, oblique retort, poignant moments, comedy, tragedy, and, under all, the older Vermonter’s traditional attitudes toward the hours and the minutes of daily living and the problems they bring. Most of the poems are too long for the space at hand, but suppose I suggest “Needling a Change,” which is “Vermontish” in essence.

**Needling a Change**

The Grover farm lay on top of the ridge Which separated the two valleys.

The road to it, steep and winding, Was always known as the “Hill Road.”

Whoever had cleared the land on the hill top Had found rich soil waiting.

Made by the trees he’d cut to clear it. The long lines of stone walls Which marked the boundaries Were monuments to the unending toil Of the men who harvested the never-ending crop of stones.

Elijah Grove was the third generation on the place.

He had taken over in his early twenties. He was tall and rawboned and a glutton for work.

He never kept a hired man for long, For he expected him to do as much as he himself did.

He was standing by the iron kettle Which was half inside the barnyard and half out.

Ice-cold water from a sure spring poured into it.

Elijah was talking to a man in a car. “Yes, sir,” he was saying, “I’m seventy-eight, or I will be next month if I live.”

The visitor thought he seemed rugged enough So he should easily make his birthday at least.

“Well, I’ve had the bitter with the sweet, Seventy-eight years of it’s quite a spell. Ain’t been feelin’ too good this winter.”

He put his foot on the water kettle. “Sometimes I wonder if it agrees with me here,” he added.

The history of a hill farm and the final result in Elijah is woven into the lines. Among many Vermont voices that are to fade into silence, Walter Hard’s voice will be lasting.
Lincoln Iron

The Story of the Lincoln Iron Works of Rutland, Vermont

A typical Vermont foundry business, against the trend to specialization, builds solidly on diversity of products and Vermont workmen's many skills.

by Walter Hard, Jr.

Photography by Donald Wiedenmayer

Some day accident may take you down West Street in Rutland past the railroad yards and beside an odd assortment of brick and wooden buildings, old and smoke blackened. They look a lot like other old industrial buildings you see in New England, except for a brand new structure in the center.

This is the Lincoln Iron Works, founded in 1864 and named for the Civil War president. Idly you may wonder how such a plant as this, doing foundry and machine work, can stay with the modern, big competition.

But step inside the small office. Go through the old plant and you'll see why this Vermont foundry business can keep up with the best of them. And you'll see, too, that a uniquely Vermont philosophy of business and of workman skill is behind it.

In a day of specialists and single products this old Rutland company has been built soundly upon diversification of products. And, more important, it has capitalized upon the native mechanical talents of Vermonters, building up a corps of workmen who are not skilled in one field only. They can do and do well a diversity of industrial jobs.

Lincoln Iron Works started in the days when steam power was paramount, to repair steam engines. It has made everything in its time from locomotive wheels to old-time country-store coffee grinders. But today, though they are mainly sub-contracting at Lincoln, an overnight change in markets and world demands will cause no crisis. Changing gears smoothly, Lincoln can drop its work on machines that make jet engine parts, and begin turning out stone cutting machinery or even aluminum consumer novelties and furniture. And to help keep an even keel there is also an important wholesale business in plumbing and heating equipment. As Charlie Cook in the plumbing supply building may tell you: "Some people say to stick to your old horse, when you think of branching out a bit. But we've found here it's nice to have a pair you can drive. One might go lame, even for a year. And it's good to have men who can drive any horse you have."

But let's look further into Lincoln's operation, for here is the core of those established Vermont industries that may give a deceptive appearance of being antiquated and outmoded.

Look around the cluttered yard, though, and examine those complex four-ton iron castings, big and clumsy but efficient looking. They're awaiting shipment to machine tool plants further south in Vermont. There they'll be-

RIGHT ABOVE: In the Lincoln foundry room using two ladles molten iron is poured into the core to form bed for the Bucket Thread Grinder made by the Jones & Lamson Machine Co. in Springfield.

come part of intricate thread grinders and soon will be turning out vital plane engine parts.

You begin to wonder how this collection of battered buildings can produce these complicated pieces of machinery and in competition with the big industrial centers. Gradually, as you go through the plant, it dawns that what it really takes to make machines is men, skilled men. The equipment is necessary, yes. But it's basically the men with the skills and the will to do a job the best way possible, not just turn in their hours.

Step upstairs into the Lincoln pattern room and marvel at the artistry of Frank Howard and his men in wood or metal. Here by hand they fashion to exact size and shape the pattern forms that later the molten iron or aluminum must take.

Or go down into the core room and watch Eli Webb’s men mold the oiled sand to make the shaped cores (using the hand-made patterns) that later will be the hollow parts of the castings. Outside cores are made here, too, the shells or molds for the exterior shaping of the castings. Then in the big foundry you’ll see “Maury” Carle supervise the pouring of molten iron into these carefully prepared molds.

It doesn’t end here by a long shot. Later, after the iron has set and cooled the molds are broken open and the cores removed with jackhammers and the iron sandblasted clean by James Fitzpatrick and his crew. Machining of the castings comes last. Huge planers, themselves made at Lincoln, do the work under the watchful eyes of Bob Hanley, a master machinist and a gun expert on the side. This is mainly what you’ll see today at Lincoln. But come back next week and you may well find expert core-makers doing just as expert a job fashioning Lincoln’s spiral sand pump. Or the pattern room may be working on newly designed parts for a stone saw, asbestos working machinery or delicately-designed patterns for an aluminum vase.

Diversity of product and personnel doesn’t just happen. At Lincoln they have changed with the times and dropped some lines completely, others only for the period that supplies or the demand subsided.

Electric power brought an end to Lincoln’s role in steam engine work. In 1867 they began designing and making saws to cut marble and granite. And when you want one of these huge saws, Lincoln equipment and men are ready to produce it—changed, of course, from the original models, and up to the minute in all details. They made 707 of these big saws from then until the beginning of the 20th century, while the marble industry in Vermont was in its infancy. But stone cutting has its ups and downs, and a Lincoln-built saw doesn’t need replacement often.

Before all this Lincoln’s foundries turned out a lot of things—plough shares (though apparently no swords); railroad carriage castings; that antique hunter’s dream, the Crescent Coffee Mill; and those gracefully curved iron frames that used to support pupils’ desks and seats in countless schools across the country.

From time to time Lincoln had developed new products of its own and has bought up others. These have included the Wardwell Channeling Machine (for stone quarrying), the Frenier Sand Pump (used with stone cutting mach-
ABOVE: In the Puritan Granite Company's plant at Elberton, Ga. Lincoln's latest granite polishing machine goes to work. The company has made stone-working machinery for 86 years.

ABOVE: A Lincoln-made machine in Porta, Portugal forms asbestos cement sheets.

machinery), and the latest, the production of aluminum furniture and accessories.

With their modern machine shop now complete, the Lincoln people have plans for the future that will bolster their diversification. Besides their regular, varied products they'll be able as well to undertake the manufacture of many kinds of machine tools for other manufacturers. They'll start on the drawing boards, and finish, in the new shop, machine tools that are just short of ready-for-use.

When you come out of the Lincoln plant it is with a new knowledge that industrial success in Vermont lies in a large part with the workmen, and that there is proof here in the boast that Vermonters have a unique adaptability in mechanical skills, and that they take a personal pride in their work.

Lincoln's success is based in a good measure on its men. And in the front office, plush fittings absent, talk with men like Frank Pierce, P. W. Adams, Rich Davis, or Whit Hyde.

You'll find the men who are running Lincoln today know their costs, their market trends and can plan their products upon them. But they realize most of all that it is their fellow Vermonters, who can do and do well practically anything they set their hands to, that keeps the foundry furnaces burning at the Lincoln Iron Works. END

BELOW: Cast from aluminum by Lincoln is this serviceable Louisiana coffee table.

BELOW: A Lincoln gang saw in the Robert Hunter Granite Company's plant at Milbank, S. D. Stone-working machinery is also made in Poultney, Waterbury, Montpelier and Barre.
There are Reasons

How the city-dwelling Johnsons found they belong to Vermont and are coming home at last to their new home this Spring

By Jean W. Johnson

We are coming home to Vermont, come Spring, with luck, to permanently claim something we lost, and left there many years ago—our collective hearts. We are not even natives—but year after year of being guests of the state and its people has made us realize the truth of the homily “home is where the heart is,” and it will be three transplanted outsiders who hope to take permanent root in the place they love best.

It has not been a hasty decision. We are not members of the group that can pull up stakes and move where the spirit directs, regardless of how much we would like to. The straight line of duty and responsibility, the head of the family’s job, and many other factors made us stay in the metropolitan area. We looked forward only to our annual vacation trips which always seemed to lead in one direction. Oh yes, we went on to Canada and the other charming New England states but we discourage with difficulty.

For we, too, over the years have heard the bromide of how you have to have had nine sets of grandparents born and raised in Vermont to stand a chance of being “accepted.” Accepted for what?

It has never occurred to us we would be treated any differently if we moved to Vermont to live than we have been treated when we spent time there as guests. I could say tourists, in itself a simple and honorable classification, but somehow we never felt the way tourist sounds. A peculiar statement but clear—I hope.

As New Yorkers, we work for a living. Now, thirty years of commuting a period of three hours a day on the part of the head of the house, so his family could have the advantages of space to grow in, will make our Dad’s retirement projects a joy. We will still work, but slower, doing we plan, many of the things there never was time for. Vermont has taught us that—somehow we were invited to sit on her screened porch and rest, while she made us iced tea “because it was much better for us, and the poorest comer,” quoting Mr. Lowell, “accepted.” Accepted for what?

We are not worried about being “accepted.” We are coming to Vermont because we love the scenery, the philosophy of its residents, and the opportunity and challenge it presents. We don’t expect to freeze to death any more than we expect to “find” an abandoned farm house complete with fifty acres on Route Seven for $1000. We expect to work for what we get, what we give, and what we are prepared to share, the best of ourselves. I’ve never seen a “sugaring off” except on a calendar. Our trips have always been in summer or fall. The memory of a Vermont mountain scene on an October morning has lasted through many a winter day. I am looking forward to having many of them, for just as “June may be had by the poorest comer,” quoting Mr. Lowell, “we may a Vermont autumn be there for the taking.

We are coming home, this Spring. To be classed, we hope with the little “antique” and junk man in Troy, who left his dinner to give us directions with a dignity many an ambassador could envy; with the hairdresser in Barre, who took on a disheveled traveler at a moment’s notice, without an appointment, telling me he knew it was not possible for a traveler to make one and if his two clients would cooperate he would stay late and it would be a pleasure to serve. Needless to say his clients were equally gracious. To be classed, too, with the little lady with the “stand” near White River junction, where we stopped one scorching afternoon for cokes, where we were invited to sit on her screened porch and rest, while she made us iced tea “because it was much better for us, and we looked like folks, not people.” A designation I shall remember always.

We hope to be classed, too, with the young boy in St. Johnsbury who carried my packages up the steep hill to the upper town from the shopping center, and who refused to let us “tip” him because he was coming up anyway. With the many, many people we have met over the years who are indirectly responsible for becoming our new neighbors. We will try to be good ones.

VERMONT Life 15
The increasing value and vital need of good physicians to any community is no longer debatable. Every man, woman, and child has had, at one time or another, close personal experience with this need. We all agree today that a good community is not a good community without the best medical care.

But I wonder if all of us appreciate the part a good medical college plays in the best medical care in community and state:—specifically, of course, the important part played in Vermont by our fine College of Medicine at the University of Vermont in Burlington?

If we want a quick answer (and perhaps a new insight), simple arithmetic will give both. There are only four full 4-year medical colleges in all of New England. Let us compare another New England state which has no medical college, with Vermont. In this other state, there is one physician to every 1152 persons. In Vermont, we have one to every 866. In this other state, there is one doctor practicing to every 72 square miles. In Vermont there is one to every 58.

Below: Dr. Alex Novikoff shows Miss Jean Ryan how to handle radioactive isotopes in the College’s Cancer Research Laboratory. Research projects now are a major activity.
ABOVE: A study in concentration. Senior medical students look, listen and take notes at a case discussion held at the amphitheater of Mary Fletcher hospital, in Burlington. These figures attest, is a good community because its Medical College has influenced both the quality and quantity of medical care in the state. In 1951, for example, out of 569 physicians practicing medicine within our borders, three quarters were either graduates of our Medical College or had come to live in Vermont because of its influence. Today, over half of the medical students and medical teachers in Burlington are Vermont born and, due to the emphasis placed by the school on the need of general practitioners within the state, Vermont is receiving a superior grade of medical care from its own sons and daughters. This is a sharp contrast to conditions in other places where medical students are being educated. Dr. Alan Gregg of the Rockefeller Foundation in New York, cited one place where over 80% of all medical graduates left to practice elsewhere. He aptly described this condition as “like soil erosion . . . no less dangerous for being gradual.”

HISTORY

Vermonters take justifiable pride in their Medical College which is, as few people know, the oldest state supported, 4-yr. medical school in the nation. It is also the only four year college of medicine, in New England, north and west of Boston which has always been able to maintain its four year status. The University of Vermont College of Medicine really began in 1804 when the Trustees appointed Doctor John Pomeroy as “Professor of Chirurgery and Medicine.” Its history has not only been long and distinguished, but it has chalked up a unique record of pioneering on the part of its faculty and others concerned with education in Vermont. Its early years witnessed a dire struggle to keep alive . . . money being hard to get. At one period before the Civil War, the school was actually run on subscriptions and student fees. This contrasts markedly to contemporary costs of over $3100 a year to educate each student, of which the state legislature furnishes over half.

A disastrous blow fell upon the school in 1903 when a fire gutted the entire building and destroyed all the equipment, records, and the building itself. This would have ended medical education in an ordinary state. But the challenge was met in typical Vermont fashion and in a way that constitutes a glorious page in the history of Vermont education.

Immediately after the fire, the faculty met and took a unique step. Although relatively poor men (the average income was only a few hundred a year), these doctors signed personal notes to pay for the erection of a new building. Never before or since in medical education in this country, so far as I know, has a faculty without outside help, bought and paid for a new medical college out of its own meager pockets. The new structure was completed in 1905.

In 1906 the College was granted the top A rating by the American Medical Association which distinguished it as one of the then 82 Class A Medical Colleges in the United States. Since that time its history has been one of continued advances and achievements. The University of Vermont in 1911 made it an integral part of its organization and took over the notes that the faculty had signed. A liberal arts course for medical students was inaugurated at this time. By 1917, two years of academic work were required for admission; today it is three, with four the usual. The clinical facilities, up to that time dependent on the Mary Fletcher Hospital, were then increased by the establishment of the Burlington Free Dispensary where clinics were held daily. In 1920 women were admitted for the first time. The college has been strengthened in the last fifteen years by the leadership of three outstanding men as deans: Dr. Hardy Kemp of Texas from 1939 to 1941; Dr. Clarence H. Beecher from 1941 to 1945, and Dr. William E. Brown from 1945 to 1952. Under these men began the development of the modern Medical College we know today and a new conception of the relation of the college to the people of the state, to modern medical care, and to the medical profession.

RIGHT: Freshman medical students meet the manikin. Dr. Walter Stultz uses this carefully scaled teaching aid in his anatomy classes. Left to right are Students Guyette, Prince, Okun, Burnett, (Dr. Stultz), and Black. There are 113 faculty members to instruct the present 186 medical students.
Only last fall, (1952, for this progress continues) ... the Durfee Memorial Clinic was opened at the Mary Fletcher Hospital. This beautifully equipped floor of the new wing built in 1952 is named for the beloved doctor, Herbert Durfee, who was up to his death the head of the Department of Obstetrics at the Medical College and the Hospital. It was built from funds given in his memory by Herb’s colleagues, students and friends. In this newest outpatient clinic in New England, a teaching unit of, and staffed by the Medical College Faculty, there is available to any physician in the state a complete consultation service.

CHANGES & VALUES

What I have discussed so far constitutes only the bare facts of history. I would like to fill them in with some observations that, to a layman, seem to me to mark significant changes and to reveal extremely important values and meanings for all Vermonters and those who love Vermont.

We Vermonters are, as everyone knows, an independent and somewhat stubborn folk. We like to do things our own way. We are the world’s finest and most vehement believers in local control of our own affairs. Our consistent repudiation of the doctrine of centralized power in Washington and of the welfare state is well known. If education ever, in the United States, gets into the hands of the federals, you can rest assured that Vermonters will make a last determined stand in the fastnesses of these green mountains and fight to the last ditch.


And so . . . our Medical College has, first, I think, decided meaning in Vermont because it has been solving and will continue to solve problems of medical care peculiar to our mountain state. This tends to eliminate interference and control from afar, so we may stand on our own feet. For example, the study of gerontology (diseases of the aged . . . and we have more folk per capita over 65 than any other state . . .) of tuberculosis, and of cancer, to name only three, is a major emphasis at the School not only in teaching but in research.

There is no question today about the value to the public of a Medical College in the care and treatment of sick folk. Medical care reaches its highest state, as all authorities will admit, when it is associated with teaching and research, because every step in diagnosis and treatment is fully and openly discussed by many. In this field, the College is fortunate in its wide and varied clinical facilities. Bedside teaching in the hospitals and homes is more and more employed in medical education here. Providing this to a marked degree are two Burlington hospitals: the Mary Fletcher with its new BELOW: Dr. E. L. Amidon, Professor of Medicine, introduces Sophomores to clinical medicine in the College amphitheater.
$5,000,000 wing with over 320 beds and the Bishop DeGoesbiand with 235 beds. The Fanny Allen in neighboring Winooski provides approximately 75 beds.

There are also the Free Dispensary with 20,000 patient visits a year; and the Vermont State Hospital for Mental Diseases in near-by Waterbury. Facilities for teaching are also used at the Veterans Hospital for Tuberculosis at Sunmount, N.Y., the Trudeau Sanatorium also in New York, two childrens homes in Burlington, and hospitals in Bennington, St. Johnsbury, Rutland, and Springfield.

Home care teaching is more and more emphasized through the use of the Preceptor system. Fourth-year students spend time with a general practitioner seeing home conditions as they are and not as they ideally ought to be. Home care teaching is also strengthened in the program which takes a medical student accompanied by a physician instructor into homes in the Burlington area to take part in, and watch treatment of patients under prevailing domestic conditions. Although used in Burlington for more than 20 years, schools in Boston, N.Y., Philadelphia, and Denver are now just beginning to exploit similar programs.

Although the smallest four-year medical college in the United States, its size is not a handicap but an asset to students. There is always closer contact between student and faculty (113 faculty members—many of whom donate their services—for 186 students). Students also see all kinds of actual medical practice in large as well as small hospitals and communities. At Burlington the medical student is getting a well rounded, varied and intensified education in modern medicine.

THE MEN WHO RUN IT

But a mere listing of facilities and statistics reveals only a small part of the story. What makes a medical college stand or fall is the men who run it, teach in it, do research in it, and chart its future. We Vermonters are most fortunate, I believe, in the type of outstanding men we have today doing these things at the University of Vermont. Apart from personal knowledge, one way to gauge standing of medical men is their membership on Boards of Specialties. Each branch of medicine has such a board and a young physician can not become a member until he has distinguished himself in his own field over a period of years and taken rigid examinations to prove his worth. Here is the test applied to Burlington:—in this city alone are 50 such Board members which marks, I think, the fourth highest per capita of any city in the United States, a record we can be proud of.

Vermont would not enjoy their multiple services without the Medical College.

ABOVE: A research project is planned by investigators. Dr. Bjarne Pearson (left) discusses the problem with Doctors Robertson (Experimental Medicine), Spelman (Legal Medicine), Raab (Experimental Medicine), Sichel (Physiology & Biophysics), Pierce (Biochemistry), Newhall (Anatomy), and Gallagher (Bacteriology), at right.

BELOW: A patient's brain waves help guide the surgeon. This machine produces an electroencephalogram during the operation.
In addition to this, we are lucky to have attracted to our Medical School several men famous in special fields. They have come with us, not for money, but because they fell in love with our Vermont way of life and because they realized the pleasures and opportunities of working in such a high type of small college. Many of these men before they came here were very widely known for their studies and discoveries. I think of Doctors Wilhelm Raab, George Schumacher, Alex Novikoff, Eugene Lepeshkin, John Bland, and Van Robertson, to mention those I know.

With their valuable research projects they and their colleagues are advancing the frontiers of medical science and are making our Medical College internationally known.

PERSONALITY IN TEACHING

I am, indeed, a crank on the subject of personality and its value in teaching. Today, for example, all I can remember of my own days in school is the admiration and love I held for the great men under whom it was my privilege to study. I remember them not for what they taught so much as for their intrinsic character and unforgettable personal qualities.

We have, I know from personal knowledge, many such men today teaching in our School of Medicine. I think of Dr. Ellsworth Amidon, Professor of Medicine and these last ten years medical director of the Mary Fletcher Hospital. Dr. Amidon was born on a remote farm in northern Vermont and is one of the many young Vermonters who worked his way through college. Today he is a leader in the field of Internal Medicine in New England. I also think of the brilliant young surgeon, Dr. Albert Mackay, born in Peacham, Vermont, full Professor of Surgery at the age of 35 and a man of outstanding skill and engaging personality. I shall never forget seeing him save the life of a child (who got a peanut caught in the windpipe) by that most dramatic of operations... bronchoscopy.

I recall my friend Dr. Walford Rees, born in Nashua, N. H., a man who also had to work his way through college, and who has risen to the top of his profession. Professor of Clinical Surgery and attending surgeon at the Mary Fletcher. Wally also had a remarkably successful career in the Navy during the last war.

The remarkable growth of the medical faculty and the addition of new fields of medicine now being taught were dramatically demonstrated to me when, last fall, I spent several days there comparing the school as I knew it back in 1941 with what it is today. The advances made in this last decade are impressive. I can only list a few of the new fields which were not even covered ten years ago: We now have Neurology, with Dr. George Schumacher; Neuro-surgery, Dr. R. M. P. Donaghy; Chest Surgery, Dr. Donald Miller; Dermatology, Dr. John Daly; and Orthopedic Surgery, Dr. John Bell.

Ten years ago, research was a relatively minor feature at the college. Today I am gratified to see dozens of research projects going on, showing how well we, in Vermont, are keeping up to date and always attempting to discover new advances in the treatment of disease and growth of preventive medicine. Something over $100,000 is brought in annually from outside sources for research.
In the last 15 years, the faculty has more than doubled, and there has been added a department of medical photography, an animal hospital for research, new library space and a full-time medical librarian, and three additional months a year of instruction, so that all faculty members work a full 12-months year. Also new is the residency training program, with 27 graduate fellows being educated for work in special fields or as future teachers in Vermont. These are only a few high points that mark continued progress.

Another advance is the type of postgraduate work being done today. For example, last October, as I wrote this piece, the School of Medicine conducted a most successful refresher course in conjunction with the Vermont Heart Association and under the able chairmanship of Dr. Clarence Beecher, former Dean and Professor of Medicine. All Vermont physicians were invited so as to bring them up to date as to the latest work being done in combating heart diseases. Four of the most eminent heart specialists in the East gave talks.

These meetings are today a regular thing at the College of Medicine, covering several fields of medical care. Another refresher course is being held about the time this magazine is published to which over 100 graduates of the College of Medicine will return to their Alma Mater for several days of postgraduate work and discussion.

THE NEW DEAN

Last September when the Medical College began its 148th year, a new era opened for this institution with the arrival of the new Dean, Dr. George A. Wolf, Jr. Dr. Wolf, a graduate of Cornell Medical College, took his training at the New York Hospital and distinguished himself in the reorganization of its great out-patient department. Certified by the American Board of Internal Medicine, Dr. Wolf is Professor of Clinical Medicine and takes active part in teaching at the school.

Dr. Wolf is another good example of a young man with a splendid record who was attracted to Vermont not only because of its excellent medical college, but because of the Vermont way of life. The latter, Dr. Wolf and his family had already partaken of because for some years he has owned a farm in Jericho Center, where he spent all his spare time. Dr. Wolf is planning new programs for the school and will, if I am any judge, begin to place a new emphasis on the value of the Medical College to the state, and the proper function of a medical college in a state, as well as its value to the people.

(Continued on page 52)
FURNITURE
in the VERMONT
TRADITION

The Story of the Cushman Colonial Creations

By Bradford Smith

Color Photography by Reuben Greene

WATER SUPPLIES power to the H. T. Cushman Manufacturing Company as it did to the first industries to settle along Paron Creek in North Bennington a hundred and seventy-five years ago. But Cushman changed water power into electricity to turn the high-speed lathes and shapers in its plant. This combination of old Vermont with modern technology is characteristic of the Cushman Company. It goes a long way toward explaining the unique success of this native Vermont firm.

Adapting the old to the new is a family tradition, inherited from the founder of the firm, Henry Theodore Cushman. When Henry Cushman—a volunteer at seventeen—came home to Bennington from the Civil War, he started a small business making corks for bottles. The large quantities of waste cork troubled his Yankee conscience. So he hit upon the idea of making mattresses with it. Yankee inventiveness soon led him into other manufacturing fields. He invented a rubber eraser to go on the end of a pencil. The patent for this device Cushman later sold to the Dixon Crucible Company.

While inventing and producing many other novelties—an ink eraser, an ink eradicator, roller skates made of wood—he began to market them directly by mail. His United States Mail Supply Company was one of the first successful mail order houses. Items like his pocket roller slate—a device made of canvas covered with asphaltum—were sold mostly through premiums offered by the Youth's Companion.

In 1886 the enterprising Cushman, now forty-two, began to make furniture under the name of the H. T. Cushman Manufacturing Company. In 1892 he moved to the big stone mill (built in 1833) which is still a part of the Cushman plant. His hat racks, screens, umbrella stands and towel racks, horrendously ugly by modern standards, sold well. He also manufactured, in the same rod and ball or spindle styles, the ginger-bread grill work...
ABOVE: The Stone House, built in 1834 of Vermont blue stone taken from its cellar excavations, was the home of H. T. Cushman for 50 years. It now houses a permanent exhibit of Cushman creations. Across the street, Vt. Route 67A, stands the manufacturing plant of the company.

that used to be placed in the doorway between the parlor and living room of a Victorian house. Another popular item was the "Lady's Friend," a combination towel rack and sponge holder—for use with that new-fangled gadget, the stationary bathtub—which made a hit with the tidy housewife of the eighties.

Always sensitive to changes in popular taste, Cushman converted to mission furniture in fumed and golden oak around the turn of the century. His first item in this line was a "cat screen." This was a fire screen showing a mother cat and two kittens in which black fur—allegedly rabbit—was used for the cat bodies. There is no extant census of the North Bennington cat population of that time to substantiate the rabbit story. Anyhow, Cushman couldn't turn these screens out fast enough! He also developed the first mission table with shelves in the ends and, as the telephone became a feature of American households, built the "Betunial" (Beat 'em all!), a small table with hinged stool. Then came shoe polishing stools, smokers, humidors.

The Cushman Company had always been a family business. When Henry was making tablet erasers with the name Sterling stamped on them in gold, his wife cut the gold leaf, breathed on it to hold it in place, and put it on the eraser so that it could be stamped with a hand machine. Her surviving son John still remembers seeing the trays full of erasers being brought to the house from the shop. When H. T. Cushman died in 1922 three sons, John Henry, William C. H. and Frederick B. Cushman who had grown up with their father in the business, were left to expand and develop it into the present line of Cushman Colonial Creations. Their abilities and temperaments made them a good team. Fred, the youngest, was a friendly, even-tempered man liked by everyone. He made an excellent salesman. He died in 1940 while still in his fifties. Will, who was "Big Bill" to the employees, died in 1950 at the age of seventy. As his nickname indicates, he was a big, fine-looking man with a largeness of character that matched his physical size. He loved to take the other side in an argument. He had great talent in manufacturing and in business matters generally, and ran the plant for fifty years.

The surviving son, John Henry Cushman, has been president of the firm ever since his father's death. A vigorous seventy-five, he is not only an expert sales executive held in deep affection by furniture people from coast to coast, but
is a steady golfer, a trained singer, and a grand story teller. His hobby, he says, is loafing. If this is so, he has loathed to good effect. The pleasantly informal atmosphere of the Cushman plant is no doubt due in large part to him. Workers wander in and out of the big office shared by the top management on one errand or another. They don't have to wait or knock. Most of them call the top executives by their first names. The sense of independence surviving from the days when each man produced his own necessities is still noticeable in the relationship between worker and employer.

The Cushman sons were brought up by their father to work together as a team, and to cooperate whole-heartedly in any plan the majority agreed on. Reaching a decision often involved a lot of vigorous talk, some of which might seem to a stranger like a quarrel. John Cushman remembers how one day when they had an important decision to make, the three brothers went across the street to the Stone House where Fred's family was then living. Unknown to them Fred's mother-in-law was in an upstairs room. The brothers talked with their usual forthrightness and came to a decision. When they had left, the lady crept guiltily downstairs and when Fred's wife came home said to her, "You know, I think the boys are going to bust up."

Two grandsons of H. T. carry the family tradition into the third generation, Hall W. Cushman as vice-president and general manager, Townsend K. Wellington as vice-president in charge of sales. Like their predecessors they are active in the affairs of the community. Hall Cushman, who loves salt water sailing, is a graduate of Lehigh, past Boy Scout District Chairman, director of the First National Bank of North Bennington and an incorporator of Bennington's excellent modern hospital. Townsend Wellington, a Yale graduate, is a trustee and director of the Bennington Historical Museum and Battle Monument Association and executive trustee of Vermont's Colonial Shrine - the Bennington Centre Cemetery Association, next to the beautiful Old First Church. Top management also includes two non-Cushmans—A. R. Willard as treasurer and Burton L. Bromley, who has been with the company over fifty years, as superintendent and assistant treasurer.

The Cushman Company, while keeping up with the times, has managed to preserve the worthwhile traits of a family-run handcraft business closely related to the small community in which it is set. North Bennington, once popular with manufacturers because of its excellent water power, has always had several small industries operating along the banks of Paran Creek. Grist mills came first, then textiles and shoes. In the days before the movies, North Bennington supplied a large part of the world's stereoscopes. Later it produced the Kiddie Kar.

Operating under its own village government, North Bennington (population 1327) has intense local pride. It has its own central school including a high school, its own bank (a widely respected one which attracts business from a large area), its own shopping center. It is a railroad center for the area, and Bennington folk who want to go to New York or Burlington have to come to North Bennington to catch the train. And it is wryly proud of the fact that it is a lot nearer to the Bennington battlefield (actually in New York state) than is Old Bennington where the famous battle monument stands. Bennington College begins at the top of the hill where the houses of the village taper off. The college, incidentally, is well supplied with Cushman furniture, which looks both dignified
CATALOGUE

1892

SPECIALTIES

IN FINE GRADES OF

House Furnishing

GOODS!

H. T. CUSHMAN M'FG CO.,

Sole Manufacturers

Of the Popular Rod and Ball Goods,

NORTH BENNINGTON, VT.

This is a special confidential sheet, quoting "BOTTOM" net prices, 30 days.

ABOVE: These pages from the Cushman catalogue of 1892 may be used as a benchmark for the development of American taste in the last sixty years. In the Nineties the Cushman company turned out odd pieces of the "rod and ball" furniture that graced many a Victorian parlor.

and informal in the academic setting. One of Cushman's employees, Reuben Greene (who took the color photographs for this article), is the college's instructor in photography.

It is in this small, friendly community where everyone knows everyone else that Cushman workers live. Most of them have been with the firm a long time. Stewart Hall, who died last fall, worked with the firm most of his life until over eighty. Three generations of the Barber family have worked at Cushman's. Jake was foreman of the staining department, and his son and grandson now work together. Frank fitting drawers and Ralph assembling them. There is practically no employee turnover, no seasonal fluctuation, no layoff. There is a saying in town that it's hard to get a job with Cushman, but once you're in, you're there for life.

Cushman employees—there are 175—are members of the Upholsterer's International Union of the AFL. They have a union shop, get holidays with pay, group insurance, and an annual vacation with pay up to two weeks, based on length of service. Wherever possible, jobs are placed on an incentive plan so that skilled workers can earn extra money.

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BELOW: Hedged in between essential water power and the highway the Cushman buildings take up all the available flat space in the narrow valley leading into North Bennington.
ABOVE: In the front living room of the Stone House, Henry T. Cushman and Eliza Hall were married eighty-six years ago. Later Fred Cushman, one of the three sons, lived here, and now the building houses a permanent exhibit of Cushman furniture. By custom the Cushman sons came here from the factory across the street to thrash out important problems. Majority opinion always ruled their business decisions.

BELOW: This modern lift, Louis Butler at the controls, can handle up to seven tons of lumber at a time. Rough lumber is stacked here for seasoning and is later moved onto cars of a private, narrow-gauge railroad for delivery to the kilns. There the wood is dried to the exact, required degree before the furniture parts are sawed and then shaped. Limited yard space makes efficient placement of the lumber mandatory.

RIGHT ABOVE: The family living room of the Stone House is furnished with a variety of Cushman-made pieces, their design developed from a motive found in some old furniture discovered in nearby Shaftsbury. The portrait on the wall is of Henry T. Cushman, who founded the company on his return from the Civil War. In 1886 he gave the firm its present name and began to make furniture in the old mill.

RIGHT BELOW: The dining room of the Stone House displays a Cushman furniture suite. Its design was developed from old Pennsylvania furniture. Cushman furniture is made from solid yellow birch. Supplies of the wood come to Cushman's plant from Vermont, neighboring New York and Canada. Different woods have varying characteristics. Hard birch is tough, resists bending and shock well, is a prime furniture wood.
Skilled Craftsmen, good tools, make fine Vermont furniture.

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All these facts about the people who built up the firm and who make the furniture are important. They help to explain the fact that no one has succeeded in imitating Cushman furniture, though many have tried. When Cushman asked another firm to produce the larger items for them when they were launching the new line, the attempt was a failure. Even with Cushman's help, it couldn't duplicate the finish, the unmistakable tone.

There is no cheap shortcut to the manufacture of good furniture, no substitute for the know-how of the men who build and finish it. Cushman furniture is made from solid—not veneered—birch wood. Not from the graceful white birch so common in Vermont; this tree is too soft and brittle. The rarer yellow birch is used—a wood that is actually heavier than mahogany, tougher than maple, more shock-resistant than walnut, of greater bending strength than oak. Yellow birch comes to Cushman's from Vermont and neighboring New York and Canadian forests. It is stacked in the Cushman yards, dried in one of six modern kilns where forced draft and automatic heat and humidity control assure proper conditioning, and then placed in tempering sheds under controlled atmospheric conditions for as much as two weeks.

The boards then come into the mill to be cut to proper lengths. Imperfect pieces are discarded. The rest pass on to machines which make them absolutely straight and of equal thickness, glue them together electronically for table tops and other wide surfaces, make grooves or tenons for chests, or turn legs for tables and chairs. Cushman was one of the first furniture factories to make electronically glued joints and is believed to have been the first to spray its finishes.

Surprising to the visitor is the suddenness with which the separate pieces seem to become furniture, once they have been through the many preparatory steps. By means of a device called a case clamp, for instance, a collection of boards suddenly becomes a chest of drawers. Legs quickly convert another piece of wood into a table. Table and chair legs are held in place with a wedged and glued joint which it is practically impossible to loosen.

But a lot of slow, painstaking work follows before the piece is completed. After a final sanding, the furniture is stained, lacquered, waxed—altogether nine finishing operations are required to produce a finish strongly resistant to water, heat or alcohol. Most important of all these steps is the hand wiping which accounts for much of the charm of Cushman furniture—the highlighted effect of a surface in which dark and light areas are skillfully blended. The job requires patience, judgment and artistry. Expert wiper is Charles Breen who also serves as secretary-treasurer of the AFL in Vermont and as Health Officer of neighboring Shaftsbury.

Another feature of Cushman furniture is the scuffing of edges and corners to produce an antique, comfortably rounded and lived-with effect. The method of achieving this effect by machine instead of by prohibitive hand labor was developed by the company.

A far cry from Cushman's rod and ball racks and stands, the present line came to birth in 1933. It came in the nick of time. For Cushman had been hit by a double depression—the one everyone else was feeling, and a collapse in the sale of smokers. Other lines were tried without much success—reproductions of antiques, knock-down furniture.

It was at this point that a designer named Herman F. DeVries submitted some sketches for occasional pieces which had been turned down by several other manufacturers. After the usual family conference the Cushman brothers decided to take a chance and borrowed heavily to launch the new line. From the many sketches submitted they selected those which their sales experience told them would go. They contributed their manufacturing skills and equipment and the special color and finish they had developed. But there was no way of telling whether the new line would put them on their feet or wipe them out.

Many manufacturers including Cushman had been making replicas of colonial pieces. But the new line was the first to adapt colonial ideas from the blacksmith's nailbox or tongs rack and the cobbler's bench. Cushman Colonial Creations were what the name implied—modern pieces of furniture created in the spirit of the sturdy, early colonial style. It was not to the delicate, slender lines of the late eighteenth century, but to the more solid and durable
lines of the early colonial period that they looked. Fortunately this fitted the mood of functionalism which was beginning to affect American taste.

The introduction of the new line in 1933 created a sensation. It has remained popular ever since, although the average life of a furniture style is said to be only seven years. People liked the combination of old and new—of traditional and modern. Most Americans have a nostalgic love for what is old, traditional and timeless, and at the same time a passion for the smart and the new. The Cushman style satisfied both. Its scuffed, rounded edges, soft satin finish, thick slabs of wood and sturdy, wide-thrust legs suggested age and stability. But its simplicity, its functionalism (as in the deep-scooped chair seats and the lack of ornamentation) were modern. It was informal, in keeping with the trend of modern life. It went equally well with antiques or good modern furniture. Its brown-red tone had a warmth like that of the fall maple leaf.

A Firestone executive in Akron, looking for furniture which would stand up in the homes of employees in Monrovia, West Africa, chose Cushman’s on a trial basis. It has been reordered regularly ever since. Other firms with plantations in climates that are hard on furniture have followed suit.

A store in Detroit reported that a well known automobile union official bought some pieces one day, and a member of the Ford family the next.

The wife of President Comacho of Mexico saw Cushman furniture in California and decided to furnish a summer home with it. Visitors to the New York World’s Fair may remember seeing a house furnished with it in the “Town of Tomorrow.”

Illustrative of Cushman advertising methods which have worked is the little colonial footstool, offered to magazine readers for $3.95. Once this sample of Cushman furniture enters a house, it is likely to be followed by other purchases of full-size furniture. Permanent displays of room settings in the New York and Chicago furniture markets and a traveling sales force have resulted in nationwide distribution.

Cushman also has an unusual way of meeting the public directly, through the Stone House right across the road from the factory on route 67A (the road from Bennington to North Bennington). It was in the Stone House that H. T. Cushman married Eliza Hall in 1867. He was a young man of twenty-three then, and Eliza was only nineteen. At this time her father, Henry Hall, son of a governor of Vermont, Hiland Hall, lived in the house and ran the mill. In 1892, when Cushman took over the mill, he moved his family into the Stone House in time to celebrate his silver wedding anniversary in the same room where he had been married. Twenty-five years later he and Mrs. Cushman celebrated their golden wedding anniversary in the same room. They lived in the house until their deaths in 1922.

Under the supervision of their daughter, Mrs. Caroline Cushman Wellington, the firm’s decorator, the Stone House now provides a permanent exhibit of Cushman furniture. Visitors each year run into the thousands. The rooms offer a perfect setting for the furniture produced across the road. Plain, and with a solid beauty of its own, the Stone House represents durability and permanence. It arose out of a way of life, the life of the small town, which still continues in North Bennington as in hundreds of communities throughout Vermont. It emphasizes the dignity and importance of the home. That dignity and that permanence are in Cushman furniture. The workers may not be conscious of it; the management may not be. But the customers feel it. And it is their desire to bring some of that spirit of the traditional American community into their homes which seems to explain the unique success of Cushman furniture.

Such a spirit is as intangible as it is indigenous. It comes out of a way of life, and it cannot be imitated.

H. T. Cushman, with Yankee economy, sold his cork scrap as mattresses. His descendants, equally canny, burn their wood scrap to make power. H. T. Cushman kept ahead of the times, whether with his pencil eraser, his “Betunial” or his smokers. It was characteristic of him to take something old and common and improve on it, turning it into something new. His descendants have done the same thing with Cushman Colonial Creations. It is characteristic of them that they think of their product as “the antique of tomorrow”—something old combined with something new, so honestly built and designed that it could become a future collector’s item.

Perhaps that is why this small, family-owned Vermont business has a nationwide reputation. To grow wide branches requires deep roots. The Cushman have that kind of a business.

END
by CATHERINE LEACH

GAY BLADES OF YESTERYEAR
What made a Vermonter a gay blade, three quarters of a century ago? Let’s consider Bert King Graves of Waterford, one of the dancing-est blades of his era and area.

It took a stiff wing collar and candy-striped tie; a fast horse—for a single seater sleigh lined with fur robes, come snow-time and a neat little rig with flashy wheels after mud-time—a pair of shiny patent leather dance pumps; a spotted coach dog. A deep red courtin’ scarf, fifteen inches wide, eight feet long, and fringed besides; and the most sporting deck of playing cards in Northern “V” “t” as well.

This last, the cheesecake of its day, is a card collector’s dream fulfilled. How Bert Graves came to own it bears telling.

Back in the eighties, Moore and Calvi of New York printed a series of come-on playing cards to be used for advertising purposes by the HARD-A-PORT tobacco company, maker of cut plug (“smoke and chew”). A different living actress was featured on each card, the correct number of pips being noted in the corner indice. Enticingly, these lovely, buxom beauties, some in coy costumes, others in fleshings, appeared in color! A single card was allotted to every pack of tobacco offered the chewing public (and any incidental pipe smokers)—but only one. To acquire a set of these stage charmers, complete with joker, would mean the purchase of fifty three plugs of Hard-a-Port cut plug from the glass-topped case in the general store.

Young Bert neither chewed nor smoked a pipe, yet he yearned for those long slender playing cards (2 5/16 by 3 7/8)—even their size, unusual! He consulted that friend and ally of many a stripling in his late teens, his father’s hired man, who was a fancy tobacco-chewer. He in turn enlisted the aid of three cronies. It was time to cut the late rowen, when the deal was made. The four devotees of Nicotine, selecting these lovelies quid by quid, chowed away valiantly until sugar time, before the last card filled out the deck. Then Bert carefully concealed the treasure in his hip pocket to flash before astounded poker-playing buddies. Cheesecake in the eighties was a strictly masculine prerogative; the burlesque queens were not for general display.

A courtin’ scarf might, on the other hand,—indeed must—he shared with some rosy-cheeked girl. Let her wear her most bewitching fascinator, elaborately crocheted and becomingly scalloped to frame her face, this did not rule out the courtin’ scarf, that mammoth muffer between eight and nine feet long, laboriously knitted, and often embelliished with wide bands of contrasting color into which waves of deeper shades of worsted had been worked.

After a swain had handed his lady into his single-seater sleigh, (the harness shined to a fare-thee-well, the horse girdled with quivering bells,) he deftly wound the scarf about his throat and shoulders, passing the unused end to his companion who now nestled against his non-driving hand and arm. Carefully she completed the maneuver, until both were wound in their gay worsted cocoon. A scarf made to order would set a young blood back three dollars. Bert Graves’ mother lovingly knitted him a maroon one with wide shaded rose and green bands and three-color fringe five inches long. At ninety-two he still proudly showed the scarf, as fresh as when he first wrapped it round his shoulders.

On a night cold as the grave, the miss bedded deep in buffalo fur would completely cover her face with the scarf and the one-armed driver (they had them then) would make the merest slit in these wrappings through which he might gaze at the road.

* * *

Balls, the square dance, the waltz! What Vermont gay blade ever had enough of them?

Up in Caledonia County, many of the big ones were held at The Stanley Opera House in St. Johnsbury. Per-
Perhaps a Grand Ball by the Firemen's Relief Association, with the floor manager and his aides wearing white badges while the introduction committee wore red badges. Perhaps a Grand Military Ball. Or a joint affair with Masons and Odd Fellows sponsoring a full dress ball. ("The fuller the dress, the fewer the clothes," was a standard joke.) One after another these balls would be scheduled through the cold months.

When the twenty four dances on the little orders with their dangling tally pencils had been cut in half, the word "Supper" would be installed—a vast understatement for a grand ball. These were sit-down meals, often served at the old St. Johnsbury House. Platters with tender roast turkey, platters with plump oysters swimming in cream sauce; ham, farm-cured and spiced; hot rolls, the generous dab of butter seeping into crusty tops; relishes galore; pies and cakes, pies and cakes, and more pies and cakes—the very fare to appease appetites whetted by a fast ride across wind-swept hills and a fast-stepping Polka Redowa or the Buck Horn or Schottische.

Sometimes orchestras were imported from as far away as Boston—again, there might be the local eight-piece Summerville Orchestra or Spencer's Band: in any case they could strike up so as to make the opening grand march and circle a triumph of impressiveness.

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**Order of Dances**

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<tr>
<th>1. Quadrille, Plain</th>
<th>Fire</th>
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<td>2. Quadrille, Polka</td>
<td>Water</td>
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<td>3. Contra</td>
<td>Portland Fancy</td>
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<td>4. Quadrille, Schottische</td>
<td>Gen. Alarm</td>
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**GRAND MARCH AND CIRCLE.**

**WALTZ AND NEWPORT.**

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<th>5. Contra</th>
<th>Hull's Victory</th>
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<td>6. Quadrille</td>
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<td>7. Quadrille</td>
<td>Polka</td>
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<td>8. Quadrille</td>
<td>Redowa</td>
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**INTERMISSION.**
To dance therein was to enjoy somewhat of the glide and spring which a roller skater finds in a rink. Artfully built they had a certain “give” that lent wings to the most stolid dancer's feet.

No such refinements were needed to get a young Vermonter to dancing, however. Gay blades swarmed to kitchen junkets where a lone fiddler called the figures as he bowed away and where there was no use for evening suit, white vest, white tie, and white gloves—nor spring floors!

Card playing was part of a gay blade’s life and for some, as now, immoderate drinking. For most, a glass of ale or beer or hard cider sufficed as a drink. Some took to whisky, however, and their best girls frequently sought to turn them into white-ribboners by getting them to “take the pledge”. Girls, of course, (certainly “real ladies”) just never drank spirituous liquors.

In December festivities came to a standstill. Because Christmas day fell therein it was called “The Holy Month”. A Thanksgiving Ball wound up all dance parties until a New Year’s Ball ushered in a new social season.

Summer brought the formal dancing to an end. But a gay blade might always attend the hop pickers’ balls sponsored by the owner of the hop vineyard they were hired to pick. John Darling at Concord used to give one for his help at harvest’s end. None of the frills of “The

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<td><strong>SCHOTTISCHE AND GALOP.</strong></td>
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<td>9. <strong>Ladies’ Choice</strong></td>
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<td>11. Contra</td>
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<td><strong>LA MARJOLAINES AND GALOP.</strong></td>
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<td>13. Quadrille</td>
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<td>14. Contra</td>
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<td>15. Quadrille, Polka</td>
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<td>16. Quadrille</td>
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Opry House.” No pale blue and deep rose satin slippers. No sleek broadcloth. The gay blades were right there just the same, as the old blind fiddler swung into “Pop Goes The Weasel” and offering his arm to a wind-bronzed hop-picker fresh from the arches laden with hop poles, there would be Bert Graves of Waterford, his hair slicked down and the part on the side just so, the young-man-about-town of his day, who would rather dance than eat, any time. As for sugar parties, those are a foregone conclusion—and need no comment here any more than do the hunting trips the “blades” took in common with every male Vermonter able to tote a gun over his arm.

There weren’t orchids for a girl’s shoulder “way back then,” tickets for two on the aisle, a floor-show with all the fixin’s—but there were beaux with courtly manners for the big occasion, who could give a girl a good time on a few dollars. The “wine” was mostly hard cider; the “women” were invariably fresh-faced country girls with no sophistication; and the “songs” were openly of a tender sentimental strain—yet the gay blades managed to be very gay none-the-less, and an 1880 courtin’ scarf didn’t hinder their gaiety in any way—it merely abetted Cupid.
Passengers arriving at South Royalton on the Vermont Central would listen in amazement as the Conductor used to call out "Change here to the Jigger Central Electric Railroad for Tunbridge and Chelsea." Newcomers were surprised as no timetable ever carried the schedule for an electric railroad to these towns: in fact, connections were designated by the symbol standing for a horse drawn coach.

But to the old timers of that area who had asked the conductor so many times "if the train was in on the Jigger Central" it became almost a reality. The Jigger Central Electric Railroad is a classic example of the dry-deep-chuckle so often referred to as "pure Vermont humor."

In the days of the stage coaches something had to be done for the little 15 mile run from South Royalton to Chelsea. The railroads and the more glamorous Boston-Montreal stages outshone this little spur. Even the local runs, especially the stage from South Royalton station to Fox Stand in Royalton, had something special; they used to pay their passengers to ride with them.

Marvin Hazen took the run from South Royalton to Chelsea in 1895 and hired Harry Bryan as a driver, perhaps because Bryan held the mail contract for the same route. Then these two, with Carlton Burnham, had a long coupon ticket printed and a timetable to advertise their Chelsea route. They named it the Jigger Central Electric Railroad but it was as far from being electric as it was from being central. The four-horse stage is as picturesque to us now as other relics of the past, and the one used on the Jigger Central was just like the others of the period.

The tickets for the Jigger Central poked fun at various places, people, and unsuccessful enterprises. The first coupon read as follows:

Issued by
JIGGER CENTRAL ELECTRIC R. R.
So. Royalton

By Raymond Sanders

Jigger Electric
A Vermont hoax, neither railroad.
Non-existant officially, but it ran...
Central Railroad

Jigger Railroad, as named for a village its-the-less, for some twenty years.

BELOW: This was the Jigger Railroad’s predecessor. The picture, taken about 1882 in Chelsea’s main street, shows bank at center.

Connections are made here with the Steamer Abbie Barney, striking all points on Hartwell’s Narrow Gauge, including Happy Hollow and Miller’s Bend.

The Brooklyn Crossing is only a few 100-yards from the South Royalton Station so the first part of the trip was rather short. In those days there was a long one-span covered bridge over the White River later replaced by an iron one, but even the present, modern bridge retains the name “Brooklyn Bridge.” Dairy Hill and Onionville are names of settlements in the hills of Royalton.

The next coupon reads: “Brooklyn Crossing to Shoemaker’s Falls.” This was probably the location of the South Royalton Shoe Company or the White River Shoe Company, two unsuccessful businesses being too far away from the larger markets. A few old-timers recall wearing South Royalton shoes. They always add that the firms failed because no one in Royalton or Tunbridge wore shoes, no doubt more Vermont humor.

Jigger Harbor was the designation for the third coupon. It is still known as Jiggerville although the State Highway Department has a “South Tunbridge” sign there. Except for the mill that was there and a covered bridge, it probably is much the same today as it was at the turn of the century.

The 4th coupon was to Dustin’s Corner, a mile further, and the 5th one to Tunbridge Market, the site of the World’s Fair. A 6th took you to Blood Village, their name for North Tunbridge, and a 7th to Randolph Junction. The last one was for Chelsea, the end of the 15 mile “line.”

Chelsea was described on the coupon as follows: “This town is the Head-quarters for the Fish and Game League,
and all other Sporting miscellanies pertaining to the Boot and Shoe business. You can also view specimens of the Tunbridge Granite here.”

The timetable that went with the purchase of the strip of tickets was interesting reading. The two limited expresses that left South Royalton, in the morning after the arrival of the South train and late in the afternoon after the last train from the North, were classified as Nos. 11 and 12. Under the caption, “Movement of Trains” they were limited to two miles an hour and any engineer who went faster was immediately discharged and the passengers’ money refunded.

Even in those days the public was suspicious of the postmasters for it stated that “Nos. 66 and 55 (Mail trains) will stop at all stations where there is a post-office for one hour and ten minutes. This order is imperative, as it will allow postmasters and post-mistresses time to read both sides of the postal cards.”

Signals were designated for the Jigger Central the same as for larger railroads and were explained in the timetable. No doubt the driver had his bugle as did all stage and mail coaches then. “The Engineers must not blow their whistles while standing at stations, unless there are horses enough around to make it an object,” the timetable explained. Signals were as follows: “One blast of the steam whistle denotes that the engineer is awake. Two blasts denote that a section man has been seen near the track.” The latter probably poked fun at the men employed on the Vermont Central.

The train operated under “General Rules and Regulations” one of which stated that “Conductors and Engineers will take it for granted that the right of way belongs

ABOVE: Little North Tunbridge has long been called Blood Village but it escaped the 1780 Indian Raid on Royalton just to the south.

BELOW: This is Tunbridge proper, or Tunbridge Market, looking north, site of the annual “World’s Fair.” The white church is the scene each Fall of a famous chicken pie supper. Tunbridge was midway in the Jigger Railroad’s twice-daily runs from So. Royalton to Chelsea.

A. W. Coleman
to their trains, and in case of doubt go ahead and take their chances."

There are no records of any accident on the Jigger Central as there are of the Boston-Montreal stage which once overturned at the narrow “Point of Rocks” south of the village and killed two English gentlemen on their way to Montreal.

The drivers were probably as colorful as the entire railroad setup. It was said of Carlton Burnham, who came from West Fairlee, that he was rather profane at times, in fact most all the time. No doubt it took as large a vocabulary in those days to handle four and six horses at the same time as it does in these days to handle a 12-wheeler trailer truck through the winding Vermont thoroughfares. Carlton didn’t even check his oaths when he had a clergyman on his “train,” and being called for it and pointed out where his hereafter might lie, he told the reverend gentlemen: “I’d just as lie go to hell as to heaven, for I have friends in both places.”

With the coming of the horseless carriage, the horse-coach passed into memory and with it went the Jigger Central Electric Railroad. The old coach was demoted to a mere lumber wagon, later to be discarded by the banks of the White River. Then the flood of 1927 came along and took it away down into the Connecticut or buried it along the way. No trace of it has ever been found.

There are undoubtedly, old timers now living in the hills of Tunbridge and Royalton who, upon hearing the deep blasts of the Central Vermont’s diesels or the peeping horns of trucks and cars winding up the First Branch of the White River, imagine that they are hearing the ghosts of the long ago Jigger Central Electric Railroad.
TROUT FISHING TIME
A Ritual of the Vermont Springtime

By Arthur Wallace Peach

The trumpets of the March brooks, overflowing with snow water and bugling down the hills, have softened to the thrushes' song. Creeping fires of green across the meadows flicker and flame through the winter's dead grass; the cowslips light their small torches; and in dark corners of many a garden a yellow jonquil pops out of the darkness with an unspoken but, at the same time, heard greeting to those who watch for them as the first gay word of spring—"Hi, here I am again!"

Down the valley in a cozy farmhouse a Lady of Firm Features is scolding. "Last year I bought a house, and three carpenters promised to come and help remodel it. I told them the day to come, but not one of them showed up. They came the next day, but wouldn't explain. These independent Vermonters; now in the city where I live—"

"What day was it?" one of the two men seated comfortably in the kitchen asked.

"May first!" snapped the Lady.

The two men exchanged glances after the manner of men who for ages have signaled each other when cornered by womankind; and one, an associate editor of Vermont Life, who has no fear of Ladies with Firm Features, tried to say gently: "Madam, May first is the opening of trout fishing in Vermont, and no true Vermonter works on that day—and there isn't enough cash anywhere to make him. That day is part of a ritual. It is just like the opening of deer hunting. In many shops the boss is the only one left—and he usually sneaks off for a few hours himself. Never ask these true Vermonters to work on May first. They may not tell you so, but they won't appear—gone fishing. Call them up and you may get the word—'Gone fishing.' You ought to try it; you have a good brook through your property. My old friend here is a bang-up fisherman. He might take you."

Unmoved by a kick under the table, the One not afraid of Ladies with Firm Features, listens, as he watches her features soften and hears her say: "Why, I might do that. I used to fish for snappers off Cape Cod, and I would like to try it."

So the date is made for the coming May first, but when she had departed, the One's friend glares. "You low-lived son of Ahab, you know a woman ain't built tight to go fishin' a brook. She falls around, sets down in a pool, and looks like a drowned cat when you pull her out; and when she tries to git through a barbed wire fence—why—why—it's a time for prayer!"

"Look, oldtimer," the One says mildly. "Times have changed; you must. The ladies have borrowed your pants, your haircut, your smokes, and, some of them, your cuss-words. These modern women go fishing, and you can't stop them. Then, too, a lot of them make pretty good pals on hunting and fishing trips. Charge her six bucks as a guide—"

"Can't do that;" he grunts, "she's a neighbor. But guess I'll take her if she's caught snappers... What be they?"...

A ritual it is with a series of rites. Often it starts with a shout from a shed or attic or hall. "Mother, where'd I put that..."
ABOVE: Near South Lincoln last Spring George Yarbrough of West Medford, Mass., found this camera scene on the upper part of the New Haven River, a first-class trout stream with headwaters west of the Green Mountains, flowing into Otter Creek in Weybridge. Large rainbows are taken in the lower part of the river, in this section squaaretails and brook trout. The fisherman is Sonny Chatfield of Middlebury.
fishing tackle of mine? I was dead sure it was in that box up here.”

And Mother in the living-room lifts her eyes with the ancient upward look of woman resigned and says sweetly (sometimes): “My dear, you left your tackle, your boots, your rods, your hooks, your sinkers, and a dead fish in the pocket of your fishing coat on the back porch; and I took all of them, except the fish, into the garage last August after your last trip.”

The next rite in the ritual is probably as ancient as trout fishermen—digging worms. Suppose we follow our oldtimer. He proceeds with a fork—a tined affair—and a tin can to his garden. Later on, his rheumatism may bother him when Mother asks him to spade her flower-garden. But now—not a twinge. If not to the garden, he heads for the compost heap or other spots where “garden hackles” thrive.

That evening, after supper, he recalls with a gush of pain his promise to take the Lady with the FF fishing on the opening day, but the Red Gods come to his rescue, and a “phone call from the Lady’s residence tells him that the weather looks too uncomfortable, and she will call him again.

Peace settles on the scene. Mother looks at him with amused eyes. For forty years she had seen the transformation—a home-loving man into a fisherman with thoughts off in the hills where a loved brook would be awaiting him.

“I’ll set the alarm clock, got to beat Ben to the brook,” he announces coming out of his musing. “Don’t you git up, I’ll grab a bite; an’ I won’t wake you up,”

Mother smiles: she knows what will happen—and it does—an alarm clock donging and screeching away, several thumps, a creeping down the stairs, a stumble, a soft cuss-word, silence and then a dropped dish, silence, a door slammed, silence, a car roaring and swerving off into the dusk before dawn.

Let us pause to ask if such a man, normal all the year, is sane when trout-fishing time arrives? He departs, strangely accoutered with the devices of his sport, an honest citizen known for his sobriety; he returns at dusk another individual, often with the truth not in him, with tales that not even Mother will believe.

So another rite in the ritual comes into being. Our oldtimer heads along a main road, passes the larger streams where fishermen are already collecting, turns off a side road, then far in the hills, stops his car, collects his gear, and as the dawn lightens, walks along an abandoned road, pauses at a turn, and there it is—the beloved brook he had fished for many years, its first pool silver in the dawn light. He knows every foot of that brook—the pool, for instance, beneath the old pine where “sure as shootin’ ” a big trout is hiding. Trip after trip while worm-fishing is good, as he catches one trout, another will move into the vacated tenement. And “sure as shootin’ ” he will come back to the car at the end of the day with a “mess of trout”—which will be welcomed, too, by Mother who likes and knows how to cook, country-style, a grand “feed.”

So we let the oldtimer go in peace and turn to other topics. Later on, as the spring waters lower, the fly fisherman appears, he with the often “snooey” nose when worms are mentioned, with his bamboo rods and imitation flies. The “wet-fly” fisherman appears first, then as summer comes on, and the pools grow quiet and the trout wild and cautious, the “dry-fly” fisherman, fishing from below, sends his small fly gracefully arcing and dropping on the pool where it cooks up audaciously—and where, if done skillfully, a trout may flash into spray full of amethysts and diamonds as it captures the illusion of a choice morsel. Worm-fisherman, wet-fly, dry-fly, streamer or spinner user—no matter how harsh the arguments around a campfire, each in gentle moments senses he belongs to the finest comradeship on earth except the comradship of the battlefield—the fellowship of men who love the out of doors, who find there an inner peace and outward joy no other pursuit of man can give.

The veteran with frosty hair at the campfire may speak of far off days when the trout streams, anywhere, would yield a full creel, days that as a rule are gone. The larger streams and brooks, grown warmer, no longer see the speckled trout, most beautiful of freshwater fish, in his native habitat; the brown and rainbow trout have taken his place; but back in the hills where the cold brooks run sweet and clear, Salvelinus fontinalis, bless his courageous self, aided by the State Department of Fish and Game, is more than holding his own. But like most trout in Vermont, he through generations has been educated. Deep in an alder-hidden brook he may hide where the fly fisherman is helpless, where the worm fisherman must use quiet and patience. Come down on his pool carelessly, and he will vanish like a shadow to his hideaway under a pet rock.

Then comes the evening, when with the season over, beside a kitchen table, in a den in a city home, Mother or the Sweetheart Girl looks at the man she loves. Twice, she has spoken to him, and he has not heard; then she sees that he is far away. The oldtimer holds in his hand a bit of fern he found in his creel; the dreamer in the den is looking at the remnant of a faithful fly that served him well. She knows he is dreaming—far away where a pool lies before him, the tall trees shrouding it but letting the sunlight dance here and there; he is hearing the song the brooks sing—sweetest where the ripples like fingers touch the silver waters; he is trudging down a dusky country road.
weary of foot, peaceful of mind, breathing the scent of spruce and pine, and hearing, because the outdoors has taught him to listen, a thrush ringing down a shadowed glen his vesper bell.

So the ritual closes as all rituals should with memories that outlast the rite and the hour. The mystery of why a fisherman however, abides, that has no solution probably until the eyes of earth's last fisherman close forever. Until then, he will be one with all fishermen, all lovers of woods and streams, part of a tradition reaching across oceans to English brooks and streams where Isaac Walton fished for trout three hundred years ago—

In Derbyshire
The river Dove flows down its dale
And ripples just as sweetly
At when good Master Walton fied
With Master Cotton at his side
To angle there completely.
And sometimes Master Walton scored,
And sometimes Master Cotton,
And sometimes neither caught a fish,
When Isaac sadly murmured "Fish!"
And Charles said roundly, "Rotton!"

ABOVE: Mountain brooks usually run into intercalcs or old pasture clearings with wider pools. In this warmer water trout may be more apt to take the fly. Here obstructions are much less hazardous. This might also be a good place to break off fishing and have lunch.

BELOW: This is part of the fun. The bait-fishing angler is tempting fate in the form of logs and matted brush, jammed in the stream bed by the Spring's high water, to pull out the big trout which surely lies in the pool beneath. But a firmly snagged hook is more than likely.

END
MAPLE SUGARING NEW STYLE

An eighty-year-old Wilmington Farmer displays the latest wrinkles in an old-time industry, even to accommodations for the spectators.

By J. Howard Buffum, Jr.
SHOWMANSHIP has entered Vermont's renowned maple syrup industry.

And all the credit must go to 80-year-old Martin A. Brown of Wilmington, one of the state's leading farmers and businessmen.

In the past, visitors to Vermont in the early spring have rarely had a chance to look behind the scenes of the fascinating enterprise, conducted in but a few weeks a year, which makes the nation's leading producer of maple syrup.

Most sugar bushes, or orchards, are located in out-of-the-way spots, not easily accessible to the tourist. The few that are situated on main highways always attract curious visitors, but, in any case, the sugar house of Vermont was not designed with the visitor in mind.

Even after one becomes accustomed to the general outline of the steam-filled room, the foggy blanket obscures all but the nearest operations. The boiling sap in the big evaporators might just as well not be there as far as the visitor is concerned;

LEFT: This late Winter view of an old-style sugar house is by Clifford A. Bayard of Wilmington. It is the Bion Leonard lot in Wilmington, now owned by Halbert Stetson. The sugar house is over 100 years old. Wood is still cut here with a horse-powered, tread-mill saw.

the quarters are so cramped the onlooker always seems to find himself in the way. And so, about the only satisfaction he gets is a few deep breaths of that heavenly mixture of wood smoke and boiling sap and a fleeting glance of the golden syrup as it is drawn off into cans for marketing.

But when he returns to the city he tells his friends: "I saw maple syrup being made up in Vermont." But did he really?

This dilemma of the sugar house visitor has been solved by Martin Brown.

The prosperous farmer who once offered his stately mansion to Calvin Coolidge as a summer White House, detected the "flaw" through personal operation of three huge sugar bushes, and three years ago he decided it was time to do something about it.

He needed a new and bigger sugar house, anyway. Each of Mr. Brown's three maple orchards had its own sugar house, and the problems of running all three at the same time were many.

He brought the matter to a head one evening at one of the conferences he has regularly with his two sons, Martin, Jr., and Leonard H., who have active management of the 500-acre Beaver Brook farm.

"Why not consolidate our operations by building one really good sugar house," he said, and he hastily added: "And not hidden away in the woods, but right on the highway. It would boost our sales, and would be educational."

The sons readily agreed, noting that such a set-up would reduce the number of men it then was taking for boiling operations in three locations, and would permit the tapping of more sugar-maples.

The site selected was right at the junction of Routes 8 and 9 in South Wilmington. The first task, and a big one, too, was the removal of ton upon ton of earth which formed a dome-shaped hill at that spot. Even as that work was going on, the blueprints of the massive building were given the finishing touches, and one feature not found in any other sugar house, as far as Mr. Brown knows, was a "spectators' gallery," located in just the right spot to give visitors a bird's-eye view of the boiling operations.

The framework for the 40-by-60-foot sugar house is composed of hand-hewn timbers, complete with their original wooden pegs, salvaged from a barn two miles away. Instead of the common steel smokestack, the sugar house at Beaver Brook farm has a beautiful fieldstone chimney, 30 feet tall and seven feet wide.

A large concrete apron at the south end of the building serves a double purpose. It forms the roof of a 40-foot-square underground storage room for wood and sap, and also provides a smooth ramp on
to which trucks may back to dump fuel directly into the room below, or to pipe their loads of sap into the building.

Two long, wooden tanks in the storage cellar have a total capacity of 65 barrels, and into these tanks runs sap which is piped underground for a distance of 3,000 feet from the "West" sugar bush and part of the "East" one.

Then, when this sap is needed for boiling, a portable pump is used to raise the sweet liquid into another set of tanks directly overhead on the main floor, for gravity flow into the evaporators.

Separating this array of storage tanks from another set at the opposite corner is a big elevator, which is used to raise the cordwood fuel from the basement to the main floor. It's a far cry from the usual procedure of heaving and tugging at a pile of four-foot wood, and careful maneuvering of each stick through the yawning doors of the evaporator.

In Martin Brown's sugar house, the fuel is simply loaded onto a dolly in the storage room, wheeled onto the elevator, and when the platform reaches the main floor the dolly is pushed straight ahead but a few feet right up to the firebox doors.

The sugar house at Beaver Brook farm doesn't have just one evaporator—it has three! The largest—18 feet long and six feet wide—is the common wood-fired evaporator. Attracting just as much attention is its little brother, a "baby" unit, the smallest size made and measuring just six by two feet. This is used primarily for special demonstrations and for "sugaring-off" times, when the syrup is boiled down to make maple sugar.

It doesn't look like anything special to the layman, but Owner Brown's pride-and-joy is the third evaporator, a revolutionary steam-fired unit which he predicts will make the wood evaporator as obsolete as the Model T.

The "heart" of this unit is a 100 horsepower re-circulating steam generator fired by oil and situated in a special pit in the basement. It was one of the very first to be installed in a New England sugar house, and has been the subject of interesting articles in Popular Science and the New England Homestead.

Steam from the generator passes through a pipe to the evaporator, preheating the sap on the way so it will come to a boil quicker in the evaporator itself. The steam then circulates along the base of the big pans through 416 feet of one-inch copper tubing. At the end of this network of tubes is a "trap" where the steam condenses, returns to the boiler in the form of water, and is turned into steam again in a continuous cycle.

Mr. Brown's son, Leonard, who manages the maple syrup operations as well as the farm's herd of 90 pure-bred Guernsey dairy cattle, came up with some interesting cost figures.

He acknowledged that the original outlay for a steam unit is much more than for the common wood-fired type, but he said the steam evaporator is cheaper to operate.

"We've found you can boil 12 barrels of sap an hour at a fuel cost of 35 cents per gallon of syrup," he pointed out, "whereas with the wood evaporator the cost is 50 cents a gallon." And he stressed that with the latter, the cost is figured on the wood stored in the sugarhouse, and does not take into account the time and labor involved in cutting and hauling the fuel.

Anyone who has ever started a wood fire in a stove knows that it takes time to get full, even heat. That's where the
steam-fired evaporator saves time, effort and money, too, for Farmer Brown.

With a wood evaporator, it takes an hour of sweating and fuming to stoke the fire to the point where the boiling of sap can be started, and it takes another hour at the end of the day to cautiously bank or dump the fire, without scorching the pan and the remaining sap. And on top of all this, Leonard Brown commented that "no matter how good the man is, he can't keep a perfectly even temperature," since each time the fire doors are opened to admit more fuel, this acts as a damper and the temperature of the boiling sap immediately drops, thus slowing up the entire boiling process.

"It's all push button control for the steam unit," commented Leonard. The 34-year-old graduate of Vermont's Middlebury College said when the operator starts work in the morning, he "simply pushes a button, and in 10 minutes we're boiling at full capacity, with never a variation in temperature—it's all automatically controlled."

"At the end of the day it's just a case of pushing another button, the steam dies right down, no worrying about scorching."

The operation of the steam-fired evaporator in Martin Brown's sugarhouse is a fascinating thing to watch, but there are other things to catch the visitor's fancy.

Such is the latest type of sap bucket, a transparent plastic bag which enables the gatherer to see at a glance just how full it is as it hangs on the tree. There's a sample one hung in the spectators' gallery, and you can handle it all you want; that's what it's there for. There are a thousand others out on the trees. The revolutionary plastic "bucket" as well as much of the rest of Mr. Brown's equipment was manufactured by a Vermont concern, George H. Soule & Co. of St. Albans.

Bill Cobb, gardener at Beaver Brook farm who welcomes visitors during sugaring time, points out the highlights of all operations as seen from the spectators' gallery, and you'll go away knowing more than you ever thought you would about this intriguing industry.

Beaver Brook farm boasts the annual tapping of about 7,000 maple trees—the most tapped before construction of the big sugar house in 1951 was 5,000—and it produces around 1,200 gallons of pure Vermont maple syrup annually. About 20 per cent of each year's production is sold right at the sugar house.

"Right about here you must be thinking: "Fine, but when can we pay a visit?"

Leonard Brown says the old sugaring rule is to "come home from town meetin' and set up." But to be more exact, the maple syrup season in the Wilmington section usually begins the second week in March and continues for approximately six weeks, more or less, all dependent on the weather. Sunny, mild days and freezing nights are necessary to produce a good run of sap.

And after you have paid a visit to the sugar house at Beaver Brook farm, we're sure that you will join Vermont and Vermonter's in voicing appreciation to a man who through his pioneering in the maple syrup industry is paving the way for even brighter days ahead.

The editor of the Brattleboro Reformer sums it up nicely by saying: "Vermont's maple trees don't draw their unique sap just from the air and soil of this state; they draw some of it from the history, drama and exhilarating peculiarities of people, young and old, known as Vermonters.

"No other state in the union can take a mixture of ornery, stubborn and frugal characters and extract from that mixture a state product so bountiful in its sweetness as is pure Vermont maple syrup."
WATER DOWSER

Written & Photographed by Verner Z. Reed
Fact

Here is the Author's eye-witness account of a controversial country profession.

On Sunday, October 14, a drama was enacted on Maple Mill in Plainfield, Vermont. A small drama in the eyes of the world perhaps, but a drama nevertheless. It came about in this way.

Farmer Merton Potter needed water, and to find it he had searched his lands fruitlessly for weeks; finally, he had to admit that he needed help. But to help him he called no plumbers, no geologists nor scientific water experts. He sent for a dowser, a man who has the uncanny ability to locate underground water with the aid only of a forked stick.

The dowser he sent for was a simple man, a farmer also, from neighboring West Hill. For him this was to be an everyday occurrence, for he had located many hundreds of springs and wells in the past. For Farmer Potter to call him was only natural, for everyone had always called him when they needed water.

So the dowser, Phil Duquette by name, arrived with his only equipment, a jack knife and a shovel. After some neighborly talk about the weather, livestock and the water situation in general, he went to work.

Failing to find any hazel growing nearby, Phil cut a forked stick from an apple tree in the orchard. After trimming this to his satisfaction, he went off across the fields with it held in front of him. He returned in a few minutes to cut another branch, saying the first one didn't feel just right. Starting off again with the new one, which was a good deal larger, he seemed all at once to withdraw to some private world of his own. Certainly he was oblivious to all that went on around him for the next hour or so.

Muscles tensed, head bent over his stick, up and down, back and forth across Farmer Potter's fields he went, never speaking a word or looking to right or left. After about an hour his efforts seemed to be concentrated in one corner of the far

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Theory

Author Reed speculates below on how and why water dowsing seems to work.

For the generally held theory that a force underground attracts the dowser's stick there is no proof, and it must be ascribed to superstition. The stick will not work by itself, as has been proven by numerous and careful experiments; it must be held in the hands of the dowser.

Some few dowsers, such as Evelyn Penrose, one-time official water diviner to the Government of British Columbia, can successfully locate water without the use of a stick at all. The logical assumption is that, if there is some force emanating from the water, it acts upon the dowser's brain, and in turn, his nervous system, and that when it does so, unconscious muscular movements, sufficient to cause the stick to dip, are started. This theory has some provable truth in it.

This much about it can be simply shown. Make yourself a Y-shaped rod of any kind of springy material, and hold it in any of the common ways. With a little experimenting of tensing your muscles, you can soon cause the stick to dip with no perceptible movement on your part. As the stick begins to dip, if you are holding it in just the right way, suddenly an amazing thing happens. The stick itself takes command, and with no further effort dips further and further down. You can resist this movement—which you started with your muscles—but you cannot stop it. If you resist strongly, you can cause the stick to break and the bark to peel.

Most dowsers cite this muscle-induced movement of the stick as proof of the underground attraction on it, because they are unaware that they have made any muscular contraction. But we have shown that the stick can be made to work without benefit of emanations from underground, either upon us or upon our brains. And no one has yet offered any proof that these emanations even exist.

Having eliminated the theories of underground forces, what then induces

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Above: Phil Duquette as his first step trims an apple branch into a dowsing stick.

Right: With wife Helen, Phil sets off across the fields methodically searching for water.

Fact

(Continued from page 47)

Pasture, and now he was criss-crossing only a very small area. His stick was seen to dip slightly now and again, and he was progressing gradually in a straight line up the slope. Just on the edge of the woods the stick suddenly pulled earthward with such force that it broke in his hands.

Phil stopped, and, like a man wakening from a dream, looked around at those who had been watching and announced that here a good spring would be found.

Other than for their unique water-finding ability, dowsers in general are not exceptional people. Phil Duquette is a typical dowser, of good reputation and veteran of some five hundred or more dowsings. He is 54, married, has no children, and lives quietly tending his small herd of cattle.

He discovered his ability to find water with a stick when he was about 25, when he saw an old man—"old man Raymo"—he recalls, locate a spring for his father by dowsing. He was curious, tried it himself, and found that the stick would pull downward for him in the same spots that it had for Raymo. Experimenting further, he found that it pulled at certain other spots, which invariably proved to be over running water. So, simply, he accepted the fact that he too had "the power"; he was a dowser. He will not accept money for his services, deeming it bad enough that the spring owner must do so much digging. In this he is far less commercial than most dowsers.

Phil has had no formal education to speak of. He is serious about and confident of his ability, as are all dowsers, although, contrary to most, he is very modest and readily admits that certain others are more skillful than he. Questioned about the percentage of successes in his dowsings, he thinks about 85% were good.

His reasons for the failure to locate water where his stick told him it was are bad digging or not digging far enough or as he had indicated.

Pressed for an explanation of his talent, he is vague, but feels that some force, similar to electricity or magnetism, comes up from the underground water, pulling his stick downward.

Dowsing leaves no ill effects upon Phil, aside from the long walking he must do. Some dowsers, on the contrary, are violently affected with physical illness or exhaustion. He prefers to use a hazel stick, but can use apple or willow, if necessary, and claims that no others will work.

Phil's ancestry is a trifle different from other dowsers', and possibly it is significant. His father, although not possessed of dowsing ability, was renowned as a (Continued on page 50)
the dowser, unconsciously of course, to make his stick pull?

It is a well established fact that we human beings can develop and make use of only a very small part of the capabilities of our brains. It is also well established that certain individuals can, some consciously and some unconsciously, clear their brains of the myriad surface things that clutter it up, and dredge from the depths things forgotten, and can express and make use of these things.

This can be done in a variety of ways. Hypnosis is one way, and another is the use of drugs and twilight sleep, and by trance or semi-trance conditions. Automatic writing, which in many ways relates to water divining, can be explained in this way, and the results, commonly thought to have come by some para-normal means, are only what the subject had tucked away in a far corner of his brain.

So, too, the dowser clears his mind of everyday things that clutter it up, and goes into, consciously or not, a state something like a trance. While in this state he concentrates on his stick in much the same way props are used in hypnotism and self-hypnotism. He has a certain knowledge of terrain and where water might reasonably be found, although this knowledge, that part of it which he can consciously call upon, is not sufficient for successful dowsing. In his state of trance or near-trance he can dredge up to a much greater extent the fund of knowledge, forgotten or seemingly unknown, buried in his subconscious. And, utilizing this, when he approaches the spot where with his more acute mental faculties he believes water to be, unconscious muscular activity starts the stick down.

Sometimes he is mistaken; no dowser, Henry Gross, Phil Duquette or any other, can claim 100 percent success. Dowsing is mainly based upon human knowledge and the ability of certain individuals to use their knowledge better than others. And human knowledge is fallible.

In this connection Duquette claims not to look over the terrain for likely spots for water prior to his dowsing operation, but to systematically criss-cross the land and follow the pulling of his stick to the strongest point. Yet upon close questioning he appeared to have a far better than average knowledge of where springs and where water might be found. Dowsers don't realize how much they have in them, nor how they make use of it. But it is upon this basis that 90% of their dowsings are conducted.

Our theory explains too the superstitions connected with dowsing—which vary from dowser to dowser. Some can't dowse in rubber boots, some can't if another person touches their stick, some hold the stick not with their hands but with two pairs of pliers, all favor one particular kind of wood. All these things the individual dowsers believe, and because they believe them they become important—to them—important as props to achieve the proper state of mind. This is (Continued on page 51)
LEFT: Cross-checking to find the point of strongest pull on his stick, Duquette locates the best place to dig for water at the edge of the woods. Behind him Potter calculates ruefully the amount of pipe he'll need to lay to bring water to his buildings. About 8% of Duquette's dowsings have proved successful. He feels that some force from the underground water attracts his stick.

village street. The break could be located generally, but no one remembered the exact location of the pipe, and they did not want to dig up the whole street searching for it.

They sent for Phil, who did not know and could not have known where the pipe lay. With his stick he dowsed the general area, and when the stick pulled down the villagers dug, and came within a few inches of the break. As this was an event of some importance, most of the villagers had turned out to watch the dowser at work. There were present some old timers who had seen the pipe laid but had forgotten its whereabouts. But their subconscious did not forget, as we know it never does, and possibly some telepathic communication between the old timers and Phil took place.

Many eminent people have written volumes on the divining phenomenon and few have come to satisfactory conclusions. But not knowing or caring how or why their sticks work, Phil and other dowsers will simply go on finding water for people who need it.

FACT
(Continued from page 48)
clairvoyant, and his specialty was finding lost articles. To do this, he would go with the people who had lost them, and invariably lead them to the spot where the article in question had been left. His grandfather was a mind reader. Phil himself may have inherited something of these powers, although he stoutly denies it. Phil's wife, however, is convinced that he has an uncanny ability to know the thoughts of others. He dreams a lot, often very vividly, but will admit no connection between his dreams and everyday life or with the future.

Phil can find objects and metals, especially if hidden by his wife, and like other dowsers puts this talent to use in locating water pipes and mains. He scored a remarkable success in this line some years ago in Plainfield. A water main had frozen and broken under the
RIGHT: Farmer Potter watches preparations for the digging (below) with a critical eye. His work starts here and later he must dig out the new spring completely and board it up carefully to prevent it from freezing and the walls from collapsing. Duquette does not charge people, mostly his neighbors, for finding water. He feels it is enough they must do so much digging to benefit from his finding.

THEORY
(Continued from page 49)

their importance and nothing more.

Our theory also offers a reasonable explanation for the fact that some dowsers like Phil feel no ill effects from their work, while others are violently affected physically and emotionally. Some must strive harder and concentrate harder to achieve the necessary state, and are consequently left more or less exhausted.

A factor that has been largely overlooked in tests of dowsing is that of mental telepathy. I have occasionally tested dowsers over a water main which flows under a field, farmed some ten years since the installations of the pipe and showing no trace of its location. About 80% of the dowsers found the pipe, some exactly and most within four or five feet. But we must be careful what deductions we draw from this test. Sure enough, those tested were dowsers, and good ones, as they demonstrated by finding the pipe. But I, as the tester, knew the location of the pipe, and it is a good deal more than probable that they received unconsciously some telepathic message from me.

Dowsing has been and probably always will be surrounded with an aura of the supernatural. In reality nothing supernatural occurs, as we have shown. All our theories are provable, fortunately, because they will doubtless cause violent protests from those more romantic souls reluctant to relinquish the glamour of an ancient practice.

END

LEFT: The most dramatic moment in dowsing is when the stick is proved or disproved. Potter’s shovel in a few minutes hits water, seeping into the hole from below.

RIGHT: Duquette lends a hand to bail out the hole, filling at two buckets a minute. The flow proved adequate by the shovel, Phil prepares to return to his own farm.
OUR COLLEGE OF MEDICINE  
(Continued from page 21) 

Most of us, I think, have always thought of physicians as people you call in when you are too sick to do anything for yourself. This is probably a common attitude ... and perhaps it has been due, in the past, to the emphasis in medical schools on teaching students to care for the sick after they become sick ... to the exclusion of everything else. Obviously this was, is, and always should be a major function of a medical man ... to take care of sick people. But, how about doing something so not so many people get sick? How about changing the whole direction of medical teaching around, so the main objective is to prevent sickness before it starts. To the layman, this makes a great deal of sense ... and this is what, immediately I started talking to Dr. Wolf, I discovered he planned to do.

I asked him ... “Dr. Wolf, what is the aim of the college of medicine anyhow?”

His answer was quick and simple:

“The aim is the creation of health! We can, I believe, do this only by a very simple idea: develop, exploit, and use preventative medicine to its fullest extent. And then, one step further ... arranging matters so this, as well as the care of sick people can be done economically. Then of course last ... we have got to create an efficient system to take care, economically, of the incurably ill.”

I was honored, the first day Dean Wolf began his career in Burlington, by being allowed to sit for a few minutes in a seminar which Dr. Wolf was conducting. It is called Medical Ethics and Doctor Patient Relationships. Around the large table in his office were seated that day last September, ten freshman medical students. This was not a lecture. Dr. Wolf and the students met informally to discuss everything and anything related to the study and practice of medicine. I was interested to see the Dean leading the young men and women into an informal and realistic talk of the many vexing problems that a physician faces as a person, in relation to his patients and society. The relation of the doctor not only to his patients but to his town, his state, and his colleagues was discussed here with candor and frankness.

I cite all this to illustrate the new trend in teaching at the Medical college ... Small, informal groups ... instead of large lecture halls is the concept of efficient teaching that the new Dean will continue to develop.

MEANING TO VERMONT

And what does all this add up to in relation to Vermont? That our Medical College has been a great factor in bettering the Vermont way of life no one will deny. But that it can become, under certain circumstances, even a greater factor, is the main emphasis I wish to make here. Today, many advances in medicine have been due largely to good teaching and research in our medical colleges. We have practically eliminated typhoid fever, diphtheria, scarlet fever, and lobar pneumonia as well as cutting down infectious diseases among children. Expense of medical education in the United States has been multiplied by four in the past 25 years. In 1920 it cost $500 per student per year. In 1970-71, the cost per student at the UVM medical college was $3,100. Since the Vermont resident student pays a tuition of only $550 this means that the people of Vermont, through the legislature and private funds, paid the balance ($2550) of the cost of educating each Vermont student!

No one will deny that the answer is YES to the question of whether or not this is a paying investment. No one, I think, will deny that Vermont must continue to have the best trained physicians it is possible to produce.

In addition to the services of the some 400 UVM graduates now practicing in Vermont, the Medical College gives to the people of Vermont through its services to the hospitals in and out of Burlington, as well as to various departments of the state and to welfare groups, approximately $400,000 a year.

IS SCHOOL TO GROW?

Today, as former Dean Brown emphasized in one of his last messages to the Alumni, like many other colleges, the University of Vermont College of Medicine is at the crossroads. Is the school, built fifty years ago, adequate to cope with present needs? Can it maintain its place as a top-rated medical college of the highest scholastic and professional standing with justifiable pride in its faculty and its alumni? Can it, with its present buildings and equipment, keep pace in the future with the constantly changing conditions and swift advances in medical education, medical care and medical research?

Have we, in Vermont, reached as far as we can go in providing superior physicians to the public?

In addition to asking ourselves these tough questions, Dr. Carl W. Borgmann, the new president of the University, with Drs. Wolf and Harwood sat in a meeting last Fall which I was privileged to attend, and asked themselves even tougher questions: what kind of a medical school do the people of Vermont want ... not only now but in the future? How can we best meet the needs of medical care in Vermont in the next several decades?

In the next few months they propose to find answers to these questions. END
If you yearn for a vacation that is wholesomely different from anything you've ever experienced . . . you and Vermont should meet at once. In beauty of lake-and-mountain landscape, in friendly hospitality, and in elbow room for healthful play Vermont is unmatched.

Here, too, even your fellow guests are apt to be "Your type of folks" . . . attracted by similar preferences for the finer things of life. Sample the Vermont Way of Life this Summer; send for your FREE illustrated Vermont Highway Map . . . then USE it!

VERMONT DEVELOPMENT COMMISSION, Montpelier, Vermont

VERMONT

Beauty Corner of New England
By Arthur Griffin Courtesy First National Stores

Mr. Griffin served as his own model in this old-fashioned sugaring scene taken at the Akley place in Marlboro.

Every American's second State is Vermont

Allan Nevins, 1949, The Vermont Story