AUTUMN DRYAD

Mac Derick, photographer of Orleans, Vermont, spent half his life visualizing a picture he was going to get—some day. But, like a painter, he had to have just the right setting, and—what's more—exactly the right subject.

Then, last fall, nature ran riot with color in such a fashion that surely, men said, some autumn dryad out of medieval mythology must have painted the vivid reds and yellows of maple and birch. This was the setting.

Then, one day, he chanced upon the subject, a girl of delicate, ethereal beauty. Here at last was the awaited combination; the picture was made—and a twenty year dream realized.

Ginny Sloan, daughter of Secretary of State Rawson Myrick and herself mother of two energetic children, typifies the younger generation of the Green Mountain State. The large granite blocks are from the Wetmore & Morse quarry near Barre, whose story begins on page twenty-four.
Editor's Uneasy Chair . . .

With this issue, gentle reader, we complete our first year of publication—a year fraught with all the difficulties of getting a new enterprise under way. But many of those problems have been licked, and the way ahead looks a bit less rugged, now.

But even in a year we do not seem to have fully impressed upon everyone the sort of thing we want to publish. While on the one hand we pant for good, lively, illustrated—repeat, illustrated—articles on all aspects of Vermont life, we get floods of poetry and short stories. We print very little of either. Once in a while we might find a poem which carried the same message we normally proclaim in prose or picture; but in a year of publication there's been just one. And fiction which is not securely rooted in the Vermont past or present (like Dorothy Canfield Fisher's Ann Story) just isn't up our alley.

In short, we are not a "literary" magazine. Perhaps some of the confusion results from a similarity in names between this magazine and the old Vermontter. A number of irate people who subscribed to the latter and got only one issue have inquired of us why they hadn't received "their" copies of Vermont Life.

The question of "opinion" is a tough one. We claim that we are not a magazine of opinion. Well, that's a matter of opinion. I doubt if any non-fiction, particularly descriptive material of this sort, can be free of the writer's attitude toward "things in general"—that is, free of what the sociologists call his "frame of reference." Furthermore, a mere recital of "facts" (where, by the way, is the line drawn between "facts" and "opinion"?) is likely to be dry as dust—and as tasty.

Therefore, let's not kid ourselves; there will, inevitably, be opinion in Vermont Life. But our determination is this: that this magazine shall not be a vehicle for any party, faction, economic interest or group of promoters of anything whatsoever. Well, except Vermont.

If sometime an article seems one-sided, it's undoubtedly because of our lax system of censorship. You'll likely find a Continued on page 47
A BIBLE STORY.

When we were getting material for the book THE CONNECTICUT, one of the RIVERS OF AMERICA series recently published, we ran onto the story of the Smith sisters of Glastonbury, Conn. (No relation to the Poughkeepsie brothers of the same name.) Julia, one of the five sisters, shared with the others a dissatisfaction with the way the Bible was translated. As time went on Julia decided to do something about it and over a period of seven years she made five translations of Holy Writ: two from the Greek, two from the Latin Vulgate, and one from the Hebrew.

While she had had no idea of publication her final translation was published in Hartford, Conn, in 1878. Well, we just couldn't locate a copy nor did we find anyone who had seen or heard of such.

A year or so after we got the story we went to an auction in Pawlet and, since buying old books is our excuse for going to auctions, when a box of books was put up we bid it in for a dollar ten, sight unseen. We just knew it was a box of books. When we dumped the contents of the box out in our car the last book to tumble out was—yessir, it was Julia Smith's Bible—which wouldn't have meant a thing to the next ten thousand auction goers.

A MODEST MODEL.

Vrest Orton's article in the last issue has brought forth a good many Norman Rockwell stories. When the Post artist first moved to Vermont he was naturally on the lookout for models. One day he strolled into one of Arlington's shops and invited three of the men to stop at his studio on their way home from work. Two of them appeared shaved and dressed in their Sunday best. One was just as he came from the shop bench and he sat for the artist for an hour.

As he was leaving Norman held out a $5 bill to him. The chap backed away from it, saying: "What's that for?"

The artist explained that that was the hourly rate he always paid people who sat for him.

"Hell" said the new model, "I didn't do nothin'. I'll come and set all day for $5."

SOME OTHER "POST-BOYS."

Driving on route 7 north of Rutland we were startled to see a group of small boys on a lawn ahead all seemingly running toward the highway. When we drew near we discovered it was a group of slave-boy hitching posts such as used to grace many a lawn. There were also what looked like newly painted iron settees and chairs and plant stands from long ago.

It turned out to be the farm foundry of the Langlois family where sandcasting had formerly been a sort of hobby. The brothers had designed aluminum hatch hoods for tanks during the war and when a neighbor brought in a slave-boy hitching post to be mended they asked permission to duplicate it in this lighter metal. That started a real business which has operated on three shifts to meet the piling orders. They not only make reproductions but they've made a table with a glass top and a double pedestal base in the Queen Anne pattern. Two or three of these can handle a bridge party and then they can be hooked together to make a 60 or 90 inch dining table where any unpleasantnesses may be forgotten.

Like true Vermonters the Langlois brothers haven't built any elaborate plant. They still use the various farm buildings for the different operations and an agricultural survival in the way of Pete, a pet sheep, gravely supervises operations.
HERITAGE of VERMONT

First of a series on the growth of the Green Mountain State

By EARLE WILLIAMS NEWTON

Director, Vermont Historical Society
THE GEOGRAPHY AND GEOLOGY

Of the Green Mountain State

Its green clad mountains, fertile river valleys, and earth bound resources have determined the development of the Green Mountain State from the days of the pioneer to the era of the railroad, the factory, and the tourist trade... 

Vermont's first history is her natural history. When Samuel de Champlain first set eyes on the Green Mountains in 1609, from the waters of Lake Champlain, both mount and lake were old far beyond the memory of man. And even at that late date no one had any thought of a future "state" among this green clad wilderness.

Yet it was the shape of her topography which more than anything else was to determine how people were to live, work, move about, and—in more modern times—play in Vermont. As the white man first saw the land, there were no roads spanning the considerable distances, no cities with stocks of the world's goods, no airfields and planes with which to mock at mountain heights. There was only the virgin wilderness of forest-clad mountains, pierced by racing streams and spotted with sky-blue lakes.

It was no coincidence that it was the Green Mountains which first caught the roving eye of the great explorer, Champlain, for this ancient chain has ever been the outstanding geographic fact of both natural and human history in Vermont. Actually, in point of time, these rolling hills watched the rise of the neighboring Appalachian, the distant Rockies, and the far-away Alps and Andes.

It was Mansfield, highest summit, which Champlain saw, towering 4393 feet into the air; but there are five other peaks in excess of 4000 feet, and twenty-one over 3500 feet. This is not high compared to some of the younger mountains mentioned above, or even compared to the barren White Mountains of neighboring New Hampshire. But extending in a long chain from Canada to southern New England, these green peaks stood as both a barrier and a challenge to the first white men to look upon them.

Actually the Green Mountains themselves are only one—though the largest—of a series of ranges which stretch lengthwise of the state. Beginning on the south, the main backbone reaches due north, thrusting peaks into the sky at Mounts Glastenbury, Stratton, Bromley, Killington, Carmel, Breadloaf, Lincoln, Camel's Hump, Mansfield, Belvidere, and far to the north, Jay Peak.

Parallel to the main range are the Taconics, which spill over from Massachusetts into southwestern Vermont. In a series of peaks of which Equinox is the highest (3816 feet), they follow the Green Mountains north, with only a narrow but highly scenic valley between. They peter out about a third of the way up the state in Brandon.

Later on, now to the east, a second series of parallel peaks splits off at Pico—famed today for its ski slopes—and proceeds northward, first as the Brantree and Northfield Mountains, then, leaping the valley of the Winooski, as the Worcester range. Even further to the northeast lie the dome-like Granite Hills, inconspicuous on the landscape, but carrying the important eastern watershed. This separates the rivers flowing into the Atlantic by way of the Connecticut River from those flowing thence via Lake Champlain and the St. Lawrence. This watershed follows the main Green Mountain range to Mt. Cleveland, then hits off to the northeast. The main range to the north, for all its height, is pierced three times by the Winooski, Lamoille, and Missisquoi Rivers, and acts as a watershed only for minor tributaries to these three great streams.

Another group, so low as to hardly register on the map, and sometimes known as the Red Sandrock Hills, extends along the east shore of Lake Champlain. They begin with Snake Mountain, often called Grand View because of the sweep of horizon from its 1271 foot summit rising from an otherwise flat valley landscape. The same formations often crop out even at the Lake's edge as at Red Rocks on the south side of Burlington Bay.

There are other isolated peaks disconnected from the principal ranges, mostly "Monadnocks"—erosion remnants which owe their existence to the fact that they consist of harder rock than their surroundings. One of them in the northeast part of the state is actually called by that name, Mount Monadnock, 3200 feet high, in Lemington. Far to the south, in Windsor, is Mount Ascutney, to the summit of which there today twists a motor road.

The main mountain backbone has, from the beginning, divided the state into two halves. But the early settlers in any event would have faced eastward toward the Connecticut, and westward toward Lake Champlain and the Hudson River, for waterways have historically served as
GEOGRAPHY of Vermont

Showing elevations, principal rivers and watersheds.

Principal passes
Samuel de Champlain is believed to have been the first white man to set eyes on Vermont. It was Mount Mansfield that he saw, lying on the horizon in stately majesty. And while now man can effortlessly reach the top by motor car, or power lift, the mount itself remains unchanged today, as it had remained unchanged for centuries before Champlain. Mansfield is the highest point in the great Green Mountain backbone of Vermont.

(Deirk)

Samuel de Champlain is believed to have been the first white man to set eyes on Vermont. It was Mount Mansfield that he saw, lying on the horizon in stately majesty. And while now man can effortlessly reach the top by motor car, or power lift, the mount itself remains unchanged today, as it had remained unchanged for centuries before Champlain. Mansfield is the highest point in the great Green Mountain backbone of Vermont.

the centers of culture and civilization, almost regardless of artificial political boundaries. The early pioneers proceeded up the valley of the Connecticut, settling on both sides of the river—which, as a matter of fact, were thought by most to be equally part of New Hampshire. Even after the "New Hampshire Grants," later Vermont, were set apart, these people on the west shore had more in common with New Hampshire men across the river than with their fellow citizens over the mountains. The river served as a highway before roads, and its valley on both sides provided the rich "intervales"—meadows so fertile for pioneer farming.

Across the mountains, Lake Champlain serves as the state's western border for 112 miles, varying in width from a few hundred feet to 9 miles, (419 of its 436 square miles are in the United States, 17 in Canada). Historically, too, it has served as a gateway for settlement, and for the marching and counter-marching of countless armies. For Lake Champlain opens a great valley between the Green Mountains and the neighboring Adirondacks in New York, connecting through the valley of the Hudson River with the great port and metropolis of New York City—even in the early days a political and trading center.

The first settlements in Vermont were from Canada, along the east shore, while other important—and more permanent—colonies were established on the west shore. The Lake served as a highway not only for settlers moving south and for invading armies, but also for trade in lumber and potash northward. It was recognition of the stronger commercial ties of northwestern Vermont to Canada that caused Ethan and Ira Allen, during the Revolution, to favor a permanent union with British Canada rather than with the infant United States.

And, as with the Connecticut, the Champlain Valley provided broad shores stretching back toward the mountains—the greatest single belt of fertile farmland in the state.

The lower third of the western Vermont boundary was an arbitrary political one, resulting from the extension northward of the "20 mile line" (the west boundary of Connecticut and Massachusetts, 20 miles east of the Hudson River). But for a good bit of the way it parallels the Hudson, into which flow the two principal rivers of southwestern Vermont, the Battenkill and the Hoosac—
including the latter's historically important tributary, the Walloomsac.

A glance at the map shows how the topography of the state has thrown it into three principal regions of northern New England and New York: the Champlain Valley—which also includes northeast New York; the Connecticut Valley—which takes in all of western New Hampshire; and the Hudson Valley.

It is also easy to see on the map that, with their principal streams, these very regions in Vermont fall within the main watersheds. In the northwest the Missiquoi, Lamoille, Winooski Rivers and Otter Creek flow into Lake Champlain. Way down to the south, the Poultney and Metowee Rivers combine with Wood Creek to begin the Lake. (The sources of Wood Creek lie only a stone's throw from the Hudson River, which has its own watershed in Vermont as noted above.) The Lake then, in turn, via the Richelieu River, pours into the St. Lawrence River and Bay, and eventually the blue waters of the Atlantic. The Black, Barton and Clyde Rivers flow north into Lake Memphremagog, only one quarter of whose bulk lies within Vermont and the United States, the rest in Canada. Memphremagog in turn empties into the St. Lawrence, and thereby creates a small watershed of its own, tributary to the main St. Lawrence drainage basin.

The rivers which flow into the mighty Connecticut are smaller than those feeding the Lake, but are generally more rapid. Far to the north the Nulhegan begins the procession, followed by the Passumpsic, Wells, Waits and Ompanpanoosuc Rivers. The northward reaching branches of the White River open up the narrow Williamstown, Brookfield (Northfield) and Granville Gulf's, where also rise important tributaries of the westward flowing Winooski—the graphically named Mad and Dog Rivers and the more commonplace Stevens Branch. (Here again, waters flowing into St. Lawrence Bay via Lake Champlain, and those flowing into Long Island Sound via the Connecticut, rise only a few rods from each other.) It is these three Gulfs which today provide thin channels for the three principal highways running up the center of the state from Rutland to Montpelier-Barre and the North.

South of the White River are the Ortauquechee, Black, Williams, and Saxtons Rivers, and finally the West, or more picturesquely named, Wantatisquet River, which sends tributaries into the southern slopes of the Green Mountains.

Most of these rivers provided the early settlers with fertile valley lands for life-giving crops, as well as with water-power sites for the essential grist and saw mills—the beginnings of industry in the state.

But even more important, the rivers have served as the arteries of transportation before there were roads. And after the building of roads—and, yes, railroads too—their valleys served as the channels for these new pathways of the travel of men. They carved essential gaps through the formidable range which split the state in half. Early travelers followed rivers from the Connecticut northwest to their headwaters, where they found the sources of other rivers flowing down into the Champlain Valley. The great gaps carved by the Winooski and Lamoille Rivers are still the only passageways which either the railway or main roads can take through the Green Mountain range from Killington and Mendon Peaks—where the road struggles over a high pass—all the way to the Canadian border. South of Killington a low pass lets the railroad and highway through in Mount Holly, but below that two westbound roads must struggle over lofty elevations to reach the narrow valley between the Green Mountains and the Taconics. Even the modern miracles of rail and road play second fiddle to the works of Mother Nature, brought forth millions of years before.

In addition to the larger bodies of water—Champlain and Memphremagog—there are a number of smaller gem-like lakes and ponds, of which Bomoseen in Castleton, Dunmore in Salisbury, St. Catherine in Poultney, and lovely Lake Willoughby far to the north in Westmore, are the most famous. But there are hundreds of other smaller ponds scattered like jewels in the area between the Great Mountains and the Granite Hills, as well as occasionally elsewhere throughout the state. Most of these were left by the melting glacier which once covered all of Vermont, and which had in its southward progress scoured out hollows in the rocks and damned up stream valleys with its rock waste. But more of that anon.

One should not leave the subject of waters without mentioning the crystal springs which burst from the mountain sides to form sparkling mountain streams and, later, mighty rivers. These are so plentiful as to have furnished, as late as 1900, three-quarters of all the farms in the state with their sole water supply. Many towns and villages obtained their water by combining hillside springs. Many a fortunate city-dweller today still has a lead pipeline to a spring as well as his connection to the municipal reservoir.

Many of these springs, with unusual chemical or mineral content, were thought at one time to have a definite medicinal value. During the nineteenth century a considerable resort business was built up around the springs near Highgate, Clarendon, Brattleboro, and Brunswick. None of these play any considerable part in the recreation business today. But the scenic grandeur of Vermont's mountains and rivers is still her principal attraction for visitors from other states, who have built the tourist business into a venture rivaling in importance both manufacturing and agriculture. Still controlling the latter—and to some extent the former—with wind and rain, soil and sun, Mother Nature has from her bounteous store of emerald-hued beauty, raised up a new industry to challenge both.

(Continued on page 41)
BUFFALO BILL, some years ago, stood on the site of the present fairgrounds, surveyed the surrounding mountains, and proclaimed it the most beautiful spot for its purpose he had ever seen. A hundred thousand or so more will likewise exclaim this September since the first Monday of the Ninth month is not just Labor Day in Vermont—it is the opening day of Rutland Fair week.

Reservations will have been pouring into hotels and guest houses for months past, outlander relatives will have planned timely visits to their Vermont kin, tourists and vacationists will have arranged their return journeys through the Rutland valley to take in this so typically Vermontian Fair of fairs. And each, when intermingled with the throngs of the midways or grandstand will irresistibly have absorbed the carnival spirit as completely as has pretty Powers model Ann McClaine and her “date,” who decided to “take in” the show. And whose heart could not but again become light and carefree taking in the “crazy house” capers, the scintillating “girlie” show, the thrilling “rides” of the “World of Mirth,” the laughs at the clown act on the race track, the hazarding of mental wagers on the sulky races and, later, talking with a real live jockey and being permitted to pet his great love—his horse. It’s all there complete from the sawdust to the hurdy-gurdy to the peanuts, popcorn and hot dogs. The air is pungent and the senses reel to that spirit which only a country fair can exude. But these pleasures which we might have been sharing with our pretty Ann of the pictures are by no means indicative of the Fair as such—or of the Fair as a whole; they are not even a cross-section of its activities. Just as the “World of Mirth” show requires 48 cars to bring it to the fairgrounds so does the Fair itself require all the shows, exhibits, competitions, cattle cavalcades and such to bring it alive as true to its name.

The Arts and Crafts exhibit, for one extreme, is competitive in nature and includes practically everything from hook rugs to wood carvings. “Small antiques” exhibits cater to the lovers of this hobby while the Mid-Vermont Artists group hang its works for sale as well as to inspire others of talent and art interest to interpret on paper or canvas the Vermont scene as they see it. Ox and horse pulling contests, to the other extreme, bring local
Ann McClaine, beauteous young Powers model, and her date, "Skip" McFarlane, made a trip to Rutland to see what the real Vermont fair looked like. On the opposite page our photographer shows you something of what they saw.

rivalries to high pitch and farmers from both near and far vie with one another for ribbons and cash prizes over cattle, poultry and crops. The judges of the canning and preserving competitions keep the women folk in a dither till their decisions are announced, and the cat and dog shows are sure-fire personal rivalries. The flower exhibits are one of the most beautiful and interesting. Boy and girl groups compete with the products of their own cultivation. Grange and 4-H Club exhibits are of major interest, all competitors of the latter group having been selected through elimination contests from other fairs throughout the state, the winners being permitted to exhibit at the Springfield (Mass.) Exposition later in the season. Lovers of horses and harness races hover about the race track and grandstand hoping this season another record may be broken, as Billy Direct broke it in 1939 with a time of 2:00 3/4 for the half mile. Many state industries maintain demonstration booths at which the manufacture and application of their products are explained.

Indeed, it's a great week, Fair week, in Rutland County—that first week of September each year. But it's all in keeping with the intent of the Society's founders who, in 1846, wrote into the constitution of the Rutland County Agricultural Society, Inc., that its purpose "shall be the improvement of agricultural products, useful domestic manufactures, and mechanic arts."

It is always pitifully ironic that those who plant the seeds of what is destined to live in their memory are rarely privileged to partake of the ripened fruit. The fifty original founders of the Society, all from Rutland or adjacent communities, each subscribed $100 to total the $5000 they thought sufficient to launch the venture. For them to be able to see the Fair of today as compared with the first fair held in 1846 at Castleton, Vermont, for one day only, would indeed be warming to their hearts' cockles.

The Fairs have been held annually since 1846 with the one exception of 1917, when the then rampant polio epidemic required the restricting of all public gatherings. From 1846 to 1852, the Fair was held in different neighboring towns, the names of which have been lost in that limbo of departed memories and mislaid records. Rutland became its permanent home in 1852 under the name of the Vermont State Fair, a pseudonym later dispensed with. The old John Cain farm, now part of present day Crescent Street, was its Rutland site, and later the Baxter Estate, located in the general proximity of the present Rutland High School property, served as its home. With the acquisition of the vast acreage a mile or so South of the city at the approximate junction of Strongs Avenue and South Main Street, the Society found fairgrounds permanency.

But those early years were not all prosperous years; Fairs, as do people,

(Continued on page 48)
A cone of pink cotton candy is a necessary preliminary to a trip down the midway, from the fun house to the follies. Ferris wheels, the merry-go-round—delight of the children—as well as more hair rising rides, plus the inevitable games of chance, all provide thrills for the everflowing crowds. There are laughs at the race track, where the clowns perform in fallopies; there's the old-fashioned granite hauling contests which year after year draw enthralled audiences, and most important of all, there's the sulky races before a jammed grandstand.
DALE, the English setter, roamed through an alder edging with fast-whipping tail, crossed a small brook and drew up to a stiff point in front of a clump of hemlock and small pine. Ham Merrill, my partner was just behind the dog, and before he could get placed the grouse broke out ahead in the thick cover.

I heard a shot and an instant later saw the partridge scaling out over a hardwood slashing. He dipped in some three hundred yards ahead of us. With the bird marked down, at least approximately, we thought that here was a possible chance. Hard-headed old Dale worked cautiously and soon caught scent. But the grouse was a runner and he flushed just within gun-shot. I snapped at him futilely as he ducked down through a gully.

We were working the Hidden Cover, a long plateau clothed with alder, cut-over maple, beech and other hardwood and many small stands of pine and hemlock. Briar, sweetfern and hardhack afford good ground cover for birds, but tough travelling for the gunners. It is a fascinating situation, especially in mid-October on a bright day. Grouse come down from the hills to feed in the place, and it is a favorite haunt of flight woodcock.

We worked the cover through to the end without finding any more partridges; and apparently no longbills were in. On the way back we took a course lower down with the hope of flushing the bird that had escaped twice. In a stand of hemlock and pine Dale found him again. Ham had a shot but there was a thick and unsympathetic tree trunk in the way.

DAY'S END

FOX AND CROWS

Do foxes kill grouse? The artist thought so. Perley Pitkin discusses the pros and cons of a ticklish subject on page 37.
Off to one side, I had an opportunity to see the bird high in the air, heading for the next township. He disappeared in the direction of some very heavy alder cover where one piece of ground looks just like another. It seemed hopeless, but since the alders were situated on the route back to the car, why not try? Grouse hunters are like that. Tell them that it is reported—even just rumored—that there's a bird in a certain place and they will go through thorns and briars, rain, snow or sleet, mud and swamp in an effort to rout him out.

Ham took a course a hundred yards to the left of me and I plunged into the thickest and nastiest of the alders and berry brush. What a fool a man is, I mused, to think that he can find one crazy, wild bird in all this mess of jungle. The briars stung like hornets and alder twigs whipped my face. Making a determined plunge at a particularly obdurate clump of canes I heard thunder—the nerve-shattering sound of a big grouse clattering and pounding his way up almost at my very feet. I rocked back, clutched the gun and prepared for action. Then I saw that Old Fantail was headed directly for Ham.
“Mark!” I hollered.

The report of his 16-gauge sounded hollow from where I wallowed in thick cover, but an instant later I was able to hear the thud that indicated success.

It was big old gray-tailed bird, wise in the ways of its native woods; an old campaigner who had withstood the hostile intentions of man and dog for many seasons. Had made a fine shot, and the previous misses were forgotten; who would not trade four shells for one grouse?

We in Vermont cannot boast of the great wild turkey, most spectacular of American game birds; Bob-white will not thrive because of our rugged winter climate; the dove, a great game bird in the South, is with us only as an occasional and interesting visitor; we do not have the sharp-tailed grouse or Hungarian partridge; and that gaudy, imported fellow, the pheasant, does not take kindly to our uplands. But are we downhearted? Not in the least! For every gunner knows that the ruffed grouse—the native “pat-ridge” of New England—combines the virtues of all other game birds in one handsome, brainy, unpredictable package. Supplement him with the big-eyed, long-billed woodcock—bird of mystery—and what is there left to ask for?

The grouse cycle has been near a low point for several seasons, and though the birds are reported to be on the upswing again it would be a mistake for the visiting sportsman to think that every covert will be bulging with partridges. Even during years of plenty the gunner must expect to cover much territory in order to move enough birds for a number of reasonable shots. And the Vermont hills are rugged; grouse gunning is no game for the leisure-loving fellow. Every bird that finally rests in a game-coat pocket has been fairly earned.

In spite of our best efforts there will be blank days when things go wrong and we return with empty coats. But the memories of the hunt will never be blank. We shall look back, during the snows of winter, to masses of golden poplar leaves shimmering in the mellow sunlight against a sky of azure blue; to the stark trunks of white birches against deep green pine and hemlock; to the sight of a fine pointer or setter racing with the wind in his nose through a field of goldenrod. We shall hear again the thundering flush of a fan-tail, the whistling flight of the woodcock topping the alders.

We shall see and feel and experience all of these things and keep them close to us in memory, no matter how old we grow. For they are the real reason why we return again and again to the October uplands.
Over in Woodstock, Vermont, in the late August of every year there is a sudden influx of people in jodhpurs, dungarees, riding boots—and of cars drawing trailers. It's time for the Green Mountain Horse Association's annual Trail Ride.

Back in 1926 a few enthusiasts gathered together to organize an Association to encourage the breeding and raising of good saddle horses, and to develop a system of bridle trails over the back roads that criss-cross Vermont's hills and valleys.

Over a thousand miles have been mapped and marked for riding purposes. Little country inns and old farmhouses have been designated as over night stopping places on the trails, and it is therefore possible to take equestrian vacations varying from a few days to a few months over sections of the state little traveled by and often inaccessible to motorists. Vermont was the first state in the union to have such an organized system.

But the activity for which the Association is best known is its annual Trail Ride. Actually there are two of them: the 100 mile Trail Ride and the 50 mile Pleasure Ride. This is not meant to imply that the first is not a source of joy to the contestants also, since officials insist neither is a race nor gruelling endurance contest. But the Fifty Mile Ride is for the beginners and tenderfeet who'd rather start out more modestly.

The 100 mile Trail Ride is one of the best known horse events in the country, and is the parent of a couple dozen other hundred-mile trail rides held annually throughout western and mid-western states. It draws not only from Vermont, but a dozen other states as well. In 1947 there were sixty-five horses entered from as far away as Illinois.

The general objective of these rides is to stimulate greater interest in the breeding of types of saddle horses that will possess great stamina and hardiness as mounts for trail rides. It serves to educate both with regard to the selection of horses for long rides, and also as to the proper methods of training and conditioning for them. In the course of a couple of tries, the average rider learns a great deal about good horsemanship, as well as about the needs of his mount during and after a long ride.
This year the big event starts on August 28th—it's always shortly before Labor Day. Months ahead, the maximum sixty-five entries were booked at the Association's GHQ at Rutland. These include all the light horse breeds, with Morgans and Thoroughbreds predominant. Some of these were sent ahead as much as a month or two to be conditioned to Vermont's rolling terrain. All horses will have had at least two month's of regular conditioning before the ride.

The hundred miles is divided into two days of forty miles each and twenty miles the morning of the third day. Seven hours are allowed for each forty miles and three hours for the last day's ride of twenty miles. This seven hours includes all the time on the road from check-out to check-in. Any time consumed at the luncheon or watering stops along the road is included in the seven hours and it is against the rules to advance unless mounted. The Ride is judged on the condition of the horse at the end of the ride, as compared with the beginning, and with the time consumed on the route. Sixty points are possible for condition if a horse has had absolutely no change from the start to the finish of the 100 miles and forty points are allowed for time if the time record is perfect. For every three minutes that a horse is late on any day, one point is deducted from his “time” allowance. Points are deducted from his “condition” rating for evidence of fatigue, sore or tender backs, interference marks, heat in his tendons, or anything that the Judges feel might interfere with the horse's ability to continue the ride.

This ride is in no sense a race. No horse is allowed to finish in less than the prescribed time, and a rider is definitely penalized from the horsemanship standpoint if he doesn't ride in a manner which will bring his horse in cool and in good condition at the end of each day's ride.

The horses are all stabled during the Ride in the big Woodstock Inn Stables, one of the largest and finest in New England. They are thoroughly examined by the judges and the veterinarian the day before the Ride and every defect in condition, conformation, and way of traveling is noted and recorded. The judging is done on the trails and at the finish of the Ride and the final results are based upon the variance in the condition of the horses and the time record. The horses travel over designated routes, marked with red, white and blue arrows.

What makes this Ride such a big affair? Why is the entry list filled several months before the Ride actually takes place—something unheard of in any other horse event? Why is it that each year since the Vermont ride was inaugurated, new rides of this type spring up in other sections of the country?

It isn't because of big prizes, for they are very small. Probably it's because it is a real sporting affair. You pit your favorite horse and your riding skill against John Smith and his mount, and you have just as good a chance to win as he has, regardless of the horses. For here is a contest that is judged on condition and time—not on a horse's breeding, looks, conformation, color, age, gaits or anything else. A fifty-dollar cow pony picked up at the stock yards may give a better performance than a five-hundred dollar show horse, and a child of sixteen may bring his horse in at the finish in better condition than a professional rider.

This is what always makes it an exciting event, and many enter it year after year because they have found no other horse affair that equals it.

Another thing that attracts riders is the splendid sporting attitude of all the contestants. You will find teen-age girls and grandmothers, boys and gray-haired men, farmers and bankers, stenographers and executives, doctors and lawyers—men and women from every walk of life. All are on equal footing in this ride and there is an air of rare good fellowship and cooperation, all around.

For a picture story of the Ride, turn the page.

Dr. Earle Johnson, Rutland dentist and energetic editor-president of the G.M.H.A.

VERMONT Life
Vermont, first to establish a state-wide system, has a thousand mile network of bridle trails, carefully marked with arrows and augmented by orange spots on trees, all for the guidance of the equestrian explorer.

Back country roads, old oxen trails, and lumber roads with a soft dirt footing not only provide the ideal base for mounted traffic, but take the rider into the virgin countryside, far from the more traveled routes, and from the "madding crowd."

Lovely little inns and old farm houses are designated overnight stops, on marked trails. Lunch can be had by tying up at the old hitching post at some Country Store, for cheese and crackers, a "coke" or a cone.

Trails wind over high mountain ranges, down narrow valleys, past sparkling brooks and gem-like lakes. Over many of these passes the "100 Mile Trail Ride," a scheduled ride held annually the week before Labor Day.

For days before the big event the peaceful village of Woodstock welcomes contestants, accompanied by the inevitable trailer. Entries will have come from most of the northeastern states, and from as far away as Illinois. Many are "repeaters."

The Woodstock Inn's stables, one of the finest of the grand old stables once so common, is the rendezvous for the Ride. With 65 box stalls and every facility for horse and rider, it is an ideal headquarters.

Under the village maple tree, the itinerant smithy stands—doing a land-office business for a week. A trade largely gone elsewhere in the country, there are still many smithies left in Vermont. Side-hill farms need horses.

The horses are examined by the judges for unsoundness, blemishes, way of traveling, conformation, and any defect that might affect them on the ride. This is done the day preceding the Ride itself, and all data is carefully recorded.

Horses are likewise measured for height, heart girth, and size of bone in the lower legs as an aid in determining type. All breeds are represented, with Morgans and Thoroughbreds and their crosses predominating.
Numerous stallions have been in the ride, but only one ever won. *Lippitt Morgan*, a registered Morgan ridden by Wilfred LeBoeuf of Montreal, won the Heavyweight Division and grand Championship last year.

The evening preceding the Ride a big banquet is held for all riders. At this time, the officials are introduced and the rules and regulations governing the Ride are discussed. Many who will ride side by side meet for the first time.

Riders are divided into three divisions. The Heavyweight must carry 180 pounds or over, the Lightweight 155-180 pounds, and in the Junior Division the rider must be sixteen or under, but there are no weight specifications.

The Ride starts at 6:30 A.M., when it is almost dark, and the horses leave singly, one every half-minute. The first day they follow the red arrows north from Woodstock through Quechee, Barnard and Pomfret.

Water signs are posted along the route for those who wish to refresh their horses. Only small quantities are given if the horse is hot, and then only if he is going to move on immediately. Food is also kept to a minimum while the horse is traveling.

Judges watch the horses at unexpected spots along the trail, often at the top or bottom of a long hill, checking conditions and performance. At a luncheon spot they examine for evidences of fatigue.

The luncheon stop is at the 20 mile mark, where every rider has to report whether he stops or not. Although food and feed are available, many hasten on, since it is all time out of their limited seven hours.

The second day covers a different route, southward toward Reading. The big dance is held that evening, there being only 20 miles to go the next day. But it must be faster, since only a half-day is allowed for this final leg of the journey.

The timekeeper and judges check them in at the finish of the Ride. About 75% will finish all three days, and are awarded certificates of attainment. Trophies and ribbons are given the five top horses in each division.
COLONIAL DAY

Castleton Relives Her Past

By HELEN WORKMAN BROWN

When so many strangers came knocking at the doors of Castleton's beautiful old houses, asking enthusiastic questions, admiring the exterior and hoping to see the interior, the women of Castleton decided in the early 1930's to do something about it. Thus began the first Castleton Colonial Day.

The Castleton Woman's Club, hitting on a novel way of meeting their annual money-raising problem, opened some of their colonial homes to the public. The townspeople wore colonial costumes, and every effort was made to turn back the years to the Castleton of the early eighteen-hundreds.

No other town in Vermont, and probably few in New England, has quite such an assemblage of beautiful old buildings. Main Street itself has at least sixteen houses which were built before 1850. The oldest house in the village is the James house, built before 1787 in striking resemblance to an English cottage. Next in line, in point of age, is the Lilly-Clark house, said to have been built by Ephriam Buel, one of the first three men to come to Castleton with their families.

These early houses are very simple, but soon after them more pretentious dwellings were built. The brick Higley homestead, built in 1811, has kept much of its old charm. There is a secret chamber in the attic, for this house was a station for the Underground Railway. Visitors at noon of a sunny day (and Colonial Day is always sunny) may see the "noon mark," a dimple in the windowsill of the dining room (originally, the kitchen) so placed that two shadows of the windowsill cross the noon mark at exactly twelve o'clock.

Across the street stands the old Mascot house with its beautiful palladian window and doorway. Farther up Main Street is the Ainsworth house which has exceptionally lovely carved detail about its entrances. This house is known to have been built by the Mr. "G. Buel" who owned the hat and cap shop in the brick building next door. The painted lettering advertising Mr. Buel's establishment is still preserved above his shop door, although the building now contains living quarters and the offices of the town clerk and town manager.

Neighbor to the hat and cap shop on the west is the home of Dr. Clark, notable for its striking hallway. Also interesting to visitors are the battlements and hand carved chair railings in the Harold Ransom house, and the Waters house which was once a Wayside inn.

The well-known Langdon-Cole house has been described many times, perhaps most recently in Herbert Wheaton Congdon's "Old Vermont Houses." This was the work of the town's now famous architect and builder, Thomas Dake.

It was a fortunate thing for Castleton that Thomas Dake, carpenter and joiner of Windsor, Vermont, fell in love with Sally Deming of Castleton. They were married in 1809, and Dake built a home for Sally on South Street in Castleton. So favorably impressed by this work were the villagers that Thomas Dake became a very busy man, and Castleton had quite a building boom.

Dake was a remarkable artist. His circular stairways, unusually constructed; his delicately designed carvings in the interiors; and, above all, the floor plans and exteriors of the homes he designed all are proof of his talent.

Certainly Dake could not have done all of his construction alone. It seems reasonable to assume that he had other carpenters working with him who followed his plans but gave individual interpretation to certain details of the work. Noadiah Granger, who came to Castleton a bound boy and later became a carpenter, often worked with Dake. His home which he built on South Street is one of the most beautiful in town.

In the Federated Church, which Dake planned and helped build in 1833, stands the pulpit which he considered his best work. So interested did he become in creating the most beautiful pulpit in Vermont that, although he had contracted to build it for $250.00, he added another $150.00 from his own pocket rather than simplify his plans. He built the floor of the church with a slight slant, an innovation at that time. (See pictures, page 22.)

Completely different from other homes in the Castleton of the 1840's was that of Justus Ransom, now the Federated Church Manse. This is Georgian-Colonial in style and is a copy of the Cutts home in Orwell, the plans for
JAMES HOUSE
This brick structure, one of the oldest in Castleton is believed to have once served as a cobbler’s shop. It is to be restored as a community historical center.

JAKEMAN HOUSE
This substantial brick structure of interesting lines was built shortly after the turn of the nineteenth century. It is representative of the many superb examples of early Vermont architecture in Castleton.

COLONIAL DAY
Annually the people of Castleton gather to celebrate their historical heritage in a “Colonial Day,” when many dress in costume, and relics of a by-gone age are brought out again for one day of new life.
which came from England and filled Mr. Cutts' specifications for "a home suitable for a country squire." Eighteen fluted columns dominate its facade.

The Armstrong house also has striking columns, with a balcony. This house is composed of three parts, the first frame house was built before 1800, this was moved back and a larger dwelling built in front, and still later the imposing pillars were added. Another home reflecting the Greek spirit is that of Dr. Edward Quinn, with its Doric pillars across the entire front of the house.

Captain John Hope, well known Civil War artist, brought still another type of architecture to Castleton when he built two homes on South Street. These show a marked Scotch influence and are adorned with gingerbread and thistle.

Not only does the Colonial Day visitor have an opportunity to view the interiors of these homes, but they also may see the work of other craftsmen of Old Castleton. A tablecloth, woven in 1830 by Mr. Gilroy, is always displayed. It has scenes from the old Castleton Medical College, which once occupied one of the buildings now used by the State Teachers College at Castleton.

Visitors to the Higley home may see a square from the famous Caswell carpet. Every step in the making of this twelve-by-twelve carpet was done by Zeruiah Higley Guernsey. She began with wool from the fleece of her own pet lamb, did the carding, spinning, dyeing, and designing which resulted in the completed carpet in 1835.

All the treasures about town are collected and displayed on Colonial Day. There are old quilts, antique glass and china, pewter, a pencil manufactured in the pencil mill once located in Castleton, odd pieces of antique furniture like Mrs. John Jones's melon-shaped table. One of the highlights of the day is the parade, a heterogeneous assemblage of horse- and ox-drawn vehicles, with appropriately costumed drivers and passengers. Another drawing card is the home cooking provided those who linger throughout the day.
Langdon-Cole House (Dake)

Stairway: Ransom-Grainger House (Dake)

Ransom House (Manse)

Dake House (Showing Stairway)
BARRE
COSMOPOLITAN CITY and Granite Center of the World
The most cosmopolitan city in Vermont produces one-third of all the public and private memorials erected in the United States. These memorials are skillfully designed, quarried and produced by workers-in-stone from many lands.

When General Lafayette passed through Barre, Vermont in 1825, he was enroute from Boston to Burlington, Vt., and he and his coterie were guests of the Old Day Tavern in South Barre on the post road between the two cities. At that time Barre was little more than a country hamlet of a few hundred souls, and its granite hills were but lightly scarred by surface quarrying for millstones, doorsteps and foundation stones.

When General Grant was elected President in 1868, Barre had discovered her enormous mineral resources and a great industry was in the making. Its population was then 2,079 and its quarries had already furnished the stone for the state Capitol building in Montpelier and a few other buildings in the district, as well as paving stones for several cities.

When Admiral Dewey returned to his native Montpelier, Vermont, in 1899, after the victory of Manila, Barre had more than trebled its population and was rivalling famed Quincy, Massachusetts, as a major granite center, with virtually all its production in monuments.

When President Roosevelt visited Barre in 1936, during his tour of flood control operations in Vermont, the city had become the center of Memorial Art in America, and the most cosmopolitan community in the State of Vermont with a "district" population of nearly 16,000 and an income of nearly 15 million dollars a year.

The story of Barre is one of the epics in the annals of art and industry in America.

Quarried stones—running often over 20 tons—were drawn laboriously first by yokes of oxen, then by teams of horses from the quarries to the building site or the railroad. Today they move directly by rail up the valley from Barre toward the main line of the Central Vermont, whence they go to all parts of the world.

Beatrice Lowe Haskins

Ammi B. Young's classic state house—in its simplicity considered one of the nation's best—was thoroughly gutted by fire in 1857. Its granite walls were taken down, but the six great columns and portico left standing. A new and larger shell—again of Barre granite—with a new, higher and gilded dome, was built behind it, and stands today, a tribute to the men who designed it, as well as to the men who cut and raised its great stones.

Beatrice Lowe Haskins
Barre Guild Memorials, the creative work of talented designers, are produced in plants emphasizing ideal working conditions, with the health hazards of bygone days virtually eliminated. Circular and gang saws cut quarry blocks into slabs, the first step in the fabrication process.

It has been estimated that one third of the public and private monuments and mausoleums in America—and they are millions in number—are products of the Barre quarries and of this “international” community of sculptors, artisans, mechanics, and laborers. All this has been largely accomplished since the closing decades of the last century. It has made Barre one of the unique industrial art centers of the world. It is easy to explain why this is so.

There is a small part of Barre, Vermont in almost every hamlet, village, town and city in America, commemorating the resting places of those who have been loved and lost. Long centuries after other products of Vermont, and current manufactures in other states, have passed into oblivion, these Barre granite memorials in churchyards, cemeteries, battlefields, parks and squares will permanently designate and commemorate the ideals, the tradition, the sentiment and the devotion of the American people.

The United States Department of Commerce, the Geological Survey and other sources offer no authenticated statistics concerning the value of Barre Granite as it stands today in thousands of cemeteries, churchyards, parks and public squares. A battery of certified public accountants searching the records of quarries, manufacturers, railroads, truckmen, cemeteries, retail monument dealers and others could only approximate the total value. But from records currently available we can with some degree of accuracy estimate that the annual value in recent years runs well over 20 million dollars, and perhaps very much more. The innumerable monuments and mausoleums, pretentious or modest in size, give a clue to the patronage which Barre has earned in all quarters of the nation.

Walter Chrysler, John D. Rockefeller, Harvey Firestone, F. W. Woolworth, Sidney Colgate, Dr. S. Parks Cadman, the late Senator Carter Glass, Leland Stanford, Booth Tarkington, former Vice-President Dawes, B. F. Keith, Major General Leonard Wood, Julius Fleischmann, Phillip B. Armour, Bernard McFadden, O. O. McIntyre and many more, are but a few of the innumerable celebrities in Government, science, commerce and the professions who are commemorated by monuments and mausoleums quarried and finished in Barre. But these memorials constitute but a fraction of the Barre granite memorials erected by the American people in memory of their dead.

The story of Barre, and of the Barre Granite Industry, is a story of melting-pot Americanism, a story of pioneers, immigrant artists and artisans, and of an industrial art born of Old World tradition and New World ideals and methods. When, in 1778, John Gouldsbury and Samuel Rogers obtained their grant to the territory which now includes Barre, they little realized that the picturesque hills would bring world wide fame to their settlement. The colony was originally known as Wildersburgh, but the name was soon changed to Barre. Legend has it that the new name, borrowed from a town of similar name in both Massachusetts and England, was settled by fistic combat between two advocates for the privilege of naming the settlement.

It was not until the days of the War of 1812, however, that the commercial production of Barre granite is mentioned in historical essays and documents. The community prior to that time had been occupied with agriculture, lumbering and dairying. True, the hardy farmers had...
Slabs are steed or polished with these high speed machines. Rough surfaces are smoothed by the pneumatic hammer of the surfacing machine. The abrasive wheel of the Contour grinder, guided by templates, forms curved monument tops and sides. Checks and flutes are added with the Abrasive Edger.

utilized granite out-croppings for house foundations and mill-stones. But according to the records, it was not until Robert Parker, a veteran of Bunker Hill and the War of 1812, returned to Barre that this high grade granite was utilized for other commercial purposes. Robert Parker and one of his associates, Thomas Courser, opened the first quarry in the town. The quarry was later known as Wheaton's. They are also believed to be the first manufacturers of Barre Granite.

James Madison was president when the commercial production of Barre Granite was organized by Parker, Courser and others. It was long before the days of hard roads, railways, telephones and the telegraph. First of the contracts awarded to these enterprising quarriers and stone cutters was the State Capitol building in Montpelier, completed in 1838, an outstanding example of early American classic architecture. Pessimistically, they predicted that it would be their last contract. The huge blocks of granite were laboriously transported to the Capitol site by means of drays drawn through muddy roads by thirty or more oxen. The heavier operations were left for winter when the blocks could be drawn over the snow with sleds. The facilities for shaping and carving the unyielding granite were likewise primitive. Other problems also presented a discouraging outlook. But their skepticism proved to be unjustified.

When the beautiful new Capitol was completed, public response and praise gave these pioneer quarriers new courage, soon fortified by an order for ten million paving blocks from the City of Troy, New York. It was a contract which brought many stone-workers into the community. Barre was rapidly gaining a reputation in the stone industry that was attracting the interest of business men in the community. Among the earliest of these enterprising citizens were J. Parker and E. Hewett, the father-in-law of Emory L. Smith, first mayor of Barre and one of the earliest manufacturers of Barre Granite.

Emory L. Smith, a veteran of the Civil War, established his company in the spring of 1868. He was an alert and resourceful executive whose vision, enterprise and ideals inspired associates and contemporaries alike to anticipate the enormous demand for granite from the pioneer quarry on "Millstone Hill." Barre was the first to install permanent derricks, the first to utilize the steam drill, the first to use the electric battery in blasting and the first to introduce many innovations which revolutionized quarrying and production of granite in many lands. But there was a missing link: efficient transportation.

Despite remarkable progress in perfecting quarrying and production economics, Barre remained handicapped by transportation problems. The cost of moving heavy stones from the quarries to the "shops" and then moving the finished work to the nearest railway was a burden upon the industry and upon the purchasing public. In 1849, Governor Paine had brought the new Central Vermont Railroad up through his home town, Northfield, leaving both the rising granite center and the capital city to one side. But in 1875, the Central Vermont finally extended a branch from Montpelier to Barre. Barre in turn, in 1890, established a railroad called the "Sky Route," with a grade of 250 feet per mile from the Barre Terminus to the quarries on the "Hill." This all-rail route from the quarries, now known as the Barre & Chelsea R. R., had both an economical and psychological effect upon the community. New quarries and new manufacturing establishments followed. Barre was fast becoming, in truth, the "granite center of the world."

The news of what was going on in Barre had reached master artists and artisans in foreign lands. From 1880 on many of these craftsmen emigrated to Barre. They came from Italy, Scotland, England, Norway, Sweden, Finland, France, Spain, Germany and other European stone centers. It is easy to understand why these artists and artisans in the new community were not long in exercising a direct and profound influence upon their fellow-workers, upon their employers and upon one of the most important industrial arts in America—the art of commemoration.

Centuries of ancestral training and experience constitute the antecedents of Barre's granite men. Many of the Italian designers, sculptors, carvers, artisans and manufacturers can trace their ancestry
QUARRYING BARRE GRANITE
for a NATION'S MEMORIALS

All uncredited photographs by Harris Palmer
back to Medieval times, when Michaelangelo and other immortals of the era relied upon the superb traditional skill of the marble workers and carvers in famed Cararra, Italy, for accurate interpretation of their models or drawings. So likewise the Scotch artisans who located in Barre take pride in their heritage in the art of working stone, dating back to the earliest days of the 11th Century.

But a great change was taking place in the industrial arts during the 20th Century. Mechanical means of production have gradually replaced the more laborious and therefore costlier “handwork” or manual craftsmanship. The advent of mechanical labor-saving machinery at first created resentment among these artist-craftsmen. But this resentment soon gave way to a more practical viewpoint. A pneumatic tool in the hands of an expert carver, for example, is more efficient—and far more economical—than the old hammer-and-chisel. The same is true of modern abrasive shaping and carving of granite. But these machines and methods are useless without the master-hand of the artisan. And that is the reason why these skilled artisans of Barre, old and young, have led the way in perfecting the technique of using these modern devices to produce art in stone.

As in all other industrial art centers of the nation, the veteran artisans of Barre, at the turn of the century, were skeptical of the tendency toward mechanical production. Like other artists they deplored the machine age in Art. They were fearful that machines would break down the high ideals and traditions of their craft. But as in other industrial art centers, these men of Barre became reconciled to the value and importance of labor-saving machinery. They not only became reconciled but they became the most ingenious, resourceful and successful creators in the field of design and in the techniques of modern production. They opened new vistas and, as in other great industrial art centers, brought the expression of beauty within reach of a vast public which could not afford the cost of hand carved memorials. Nor is that all.

Barre has established a precedent in American stone production for safeguarding the health of its workers. Stoneworking had always been a hazardous vocation. Inhaling stone dust generates the dread disease known as silicosis, and the machine age multiplied the danger before it solved the problem. Barre was among the first of the mineral industries to install dust-removing equipment for combating silicosis. Barre was in the vanguard of those who adopted other innovations to safeguard the health and increase the efficiency of the worker. Among recent developments is the introduction of sprayed insulation in some sheds to protect workers from the hazards of noise as well as excess cold and heat.

In these and in other corrective programs, Barre has consistently led the industry with a policy of humanitarian interest in the welfare of the employee. And just as Barre has led the industry in progressive industrial policies so like-
The rating “Superior School” is proudly displayed over the door of the neat white Haiti schoolhouse. Local schools are entirely under the control of local boards, but the State Department of Education sets up ratings based on a number of prescribed qualifications and facilities, and awards them to schools throughout the state. The building serves also as a community center. Recent alterations include a new kitchen and dining room.

Inside, the work of pupils displayed about the room tells the story of interested pupils and masterly teaching. At the rear is a stage, which at present doubles for the library. Haiti and Miss Davis have seen to it that its children shall have access to picture books, games, and visual aids on all levels to help widen horizons for rural youth.
In many rural schools music is still considered a fad or frill. But Miss Davis makes it an integral part of daily living for these students, not only through the necessary blackboard work with notes and scales, but by individual and group participation.

The end of a school day finds Miss Davis dispatching her charges homeward. But her day is far from over: papers to mark, programs to work up, and a dozen community duties to fulfil. For Miss Davis is as much a part of the community as anyone; she's been there a lot longer than many.

Boys will be boys, but Miss Davis knows when to call enough. Exuberant spirits find full outlet in the freedom of rural life, yet knowing each student so well, the teacher knows how and when to invoke necessary discipline. The essentially personal relationship of child and teacher is nowhere better emphasized than in the individual attention given to special problems. Personal differences are recognized and weighted.
“WHITE GOLD”

... Fluid Form

By NAT DIVOLL

People have been discussing at considerable length the value to Vermont of its new “White Gold”—winter sports.

But the principal agricultural income for Vermont—and consequently the major income for the State—is from another “white gold”... in this case, milk.

Situated as it is, only a short haul from the metropolitan markets of industrial lower New England, Vermont becomes the chief source of fluid milk for those areas. This is a role for which it is admirably fitted, because of its fertile valley farm lands and upland pastures and a climate well adapted for the dairy industry, both from the standpoint of health and production of the cattle and also for the production of their necessary feed. Roughage, which is the back bone of milk production, can be and is grown in abundant quantities.

It is my purpose here to trace the evolution of the dairy industry in Vermont from its small origin to its present big business. Part of that evolution, that of the fluid milk industry, has taken place primarily during the thirty-two years of my life and consequently one that I have personally seen develop.

The history of Vermont agriculture is a record of changing conditions resulting in major shifts in the nature of the industry and in the economic status of the people. In the livestock industry it was a change from beef raising which was predominant during the first quarter of the 19th century to intensified sheep raising which saw the state become famous first because of numbers in 1830-40, and later because of excellence of breeding stock. All this became history with the predominance of production of dairy products and dairy breeding stock in the latter part of the century.

That the cow was recognized early as of importance and an integral part of the life of the State is symbolized by the State Coat-of-Arms, reputed to have been adopted in the 1790's. Vermont today ranks as one of the leading dairy states of the nation in terms of number of cattle per capita of population and number of cattle per acre of tillable land. Thus, in a measure the suggested prophecy of the Coat-of-Arms early adopted has been fulfilled and the distinction of being the only state so to honor the cow is justly placed. Perhaps, the next half century will require another change to be made. At the moment, however, nothing has been spotted on the horizon, nor have any shadows fallen across the scene to indicate that Vermont will soon be removed from a position of leadership in the nation’s dairy industry.

The origin of the first dairy cow in Vermont is somewhat obscure. The State was first permanently settled in 1755. Probably the hardy pioneers who came up the Connecticut River valley to Fort Dummer brought cows with them. How good these animals were as dairy cows is uncertain, but old town records of Hadley, Mass., a few miles south, reveal that the cows gave so little milk, especially during the winter, that some of the babies had to be brought up on cider.

The cattle owned by the Vermont farmer in 1791, and for a half century or more later, were generally of a utility type. We know this not so much from any recorded description of the animal as from the known needs and use of the products. The family food supply came then from the farm itself and milk, cream, butter, cheese and beef were vitally important items. In addition, the hides of the slaughtered animals were needed for the making of the footwear for the family. Later as the needs for food in New York, Boston and other fast growing eastern cities began to be felt, cattle moved to market in droves. In fact, beef cattle production became increasingly important and beef, along with grain, constituted the chief products to be marketed in the first quarter century following 1791. In 1808 it was estimated that the annual droves to Boston totalled approximately 15,000 head. Also, we know that for many years the draft animals for the entire farm program were the oxen produced on each farm. Even as late as 1855 one breeder writing for publication in a leading farm paper stated that, “that breed of cattle which produced the best oxen without sacrificing good dairying qualities would and should be the breed to predominate for dairy purposes.”

Before dairying was able to dominate the agriculture of the state, Vermont was destined to experience another livestock enterprise which engaged the entire population and eventually carried the state to heights of fame and glory not since equalled. This was the wool growing and sheep breeding industry which held sway from 1820 to 1840 and again flourished in the last half of the Century. Two million head is a lot of sheep, yet that is the number credited to the state in 1838.

Ten thousand dollars is a lot of money,
While there is still many a small farm that can't afford a milker, this machine now produces the bulk of the state's milk.

Yet at least one purebred Vermont Merino ram brought that money and frequent sales at from $500 to $2000 per head were made. Many hundreds of blooded stock were shipped to Argentina, Australia, West Africa and other farm points. This was surely the era of the "Golden Hoof" for Vermont and many a Vermont sheep breeder passed on explicitly believing that for Vermont, sheep breeding would, and should, never be replaced. Yet by 1840 the dairy industry had arrived.

Prior to 1850 dairy products were chiefly whole milk, cheese and butter. The first cheese factory in Vermont was established in West Pawlet in 1864. This apparently was the first successful instance in which the manufacture of the dairy products was removed from the farm to the centralized factory. This was in the midst of the period of the greatest agricultural expansion in the history of the State, 1850-1880. The number of farms in 1880 had increased to 35,522, the largest number ever reported. Cattle numbers that year were reported as 409,307. By 1915 the number of cheese factories had increased to approximately 30 but the output of cheese never again reached the volume credited to the state for 1860. Just as the sheep growing industry had to give way to the dairy cow, cheese making gave way to the more popular creamery butter manufacturing.

Butter making, still a farm operation, now took on added significance. Increased production of butter, and to a lesser degree cheese, was the theme of farmers' meetings. Days of delivery became known as "Butter Days," when much of the family trading at the stores was accomplished with the proceeds from the butter. In larger centers, the buyers themselves would come to bid for the butter. Franklin County boomed as a dairy section, and St. Albans became nationally famous for its butter and cheese shipments which, by 1871, had reached an annual total of three and a quarter million pounds of butter and nearly two million pounds of cheese.

Blessed with the advantages of the cream separator and the Babcock test device, coupled with the ability of naturally expert butter makers in the factories, Vermont's greatest glory as a butter state was attained during the quarter century 1890-1915.

Nearly 300 factories had been established in Vermont before 1915 when a peak production of 20,423,529 pounds of butter were made. Naturally the popularity of Vermont butter and cheese as made in the factories caused the discontinuance of butter making on a great majority of the farms where it had been established custom for several generations. Farm butter making still persisted, however, although definitely diminished in importance. The demand for dairy butter continued despite the availability of really high quality butter, as well as the low grade product and many substitutes.

The year 1915 apparently was the peak of the factory butter making era. Another shift in the industry was on its way. The opening of the twentieth century saw the rapidly growing industrial cities of southern New England requiring more milk and cream than the nearby farms could possibly supply. Milk marketing firms were forced to go farther into the country to find the supplies. Hotels and restaurants in Boston, Cambridge, and other nearby towns contracted directly with farms for daily cream supplies by express and many such places featured dairy products from prominent Vermont farms. Sweet cream shipments which are reported to have started from creameries in 1884 now began to increase. Delivers were made at first in the 8 quart cream jug but later in the forty quart cans, which became standard for both milk and cream in recent years, protected from the elements only by a special insulated jacket strapped in place. For several years the product made the trip to market, without the benefit of any refrigeration, in baggage cars. Milk, too, began to be shipped. The railroads, however, had no special equipment and little experience in handling the product.

These were years of rapid development, as we look back on them now. Many factors affecting the dairy industry were changed and many new ones established. Under improved rail shipping conditions—for which E. S. Brigham, Vermont Commissioner of Agriculture from 1913 to 1919, should receive a large share of credit—Vermont farmers
Artists and photographers have memorialized to the nation the soft lines and antiquarian charm of Vermont's weather-beaten barns. Yet the countryside is also studded with large, stout, trim, freshly painted barns of a very businesslike mien. Many of them have cost a sum that would have built a modest mansion. But you can't produce milk in a mansion.

turned rapidly to the milk shipping business. Sweet cream shipments declined as whole milk marketing increased. Auto trucks began to appear with the result that many of the creameries which had favorable location on railroad lines began to expand, and patronage in the smaller less advantageously located plants declined. Many ceased to operate although others struggled on for several years against heavy odds. Some have carried on as cream or milk receiving stations for the large plants located on the railroads. At the same time the business of distributing milk in Boston and its suburbs became a big business, and large milk buying corporations began to see the advantage of owning country plants and buying milk direct from the producers. In this way they were able to control the flow of milk to market and thus lessen the difficulties attending the handling of "surplus" milk—the milk not needed for consumption as fresh milk.

The hauling of milk by auto truck was soon introduced. Confined at first to the short hauls from farms to country plants and creameries, the refrigerated trucks for long hauls to market were soon inaugurated. The glass lined "thermos" type truck followed within ten years the railroad milk car of similar construction—which had been first used in this state in the middle twenties.

In 1929 more than 85 percent of the milk handled in Vermont licensed dairy plants was sold as fluid milk and cream, 15 percent was churned into butter, and barely one percent made into cheese. Vermont was then as firmly established in the fluid milk and cream business as she had been in beef in 1810, in sheep in 1830-40, and in cheese and butter production in 1880 to 1915. In 1930 only four factories making cheese were operating in Vermont and only nineteen creameries producing butter alone remained.

Dairying is Vermont's greatest agricultural asset. Of a total of more than 50 million dollars in value of agricultural commodities (other than forest products) yielded in 1939, dairy products accounted for more than one-half. There is every prospect that dairying will continue as the major agricultural enterprise of the state. Her abundant pasturage and hay production, healthful climate and environment, and high standards of quality insure profitable production at comparatively low costs. The proximity to markets and highly developed transportation systems gives promise of continued outlets. Her dairy farmers are capable, resourceful men and supply the leaders for all agriculture. The next one hundred and fifty years may bring even more drastic changes than those of the past. But the heritage of the present day Vermont farmer is to excel in animal husbandry, and to attain unchallenged heights through ability to make adjustments to ever changing conditions. We have no fear for the prestige of the state in the days to come.
JULIAN and "GO" Portrait by Catherine Richardson Kane
The Oldtime FOX HUNTER

By ARTHUR WALLACE PEACH

The fox hunter belongs to a breed of men apart—especially the oldtime Vermont fox hunter. Other hunters may seek for lesser game in the sunny covers of the autumn hills, the snowy silences of the winter swamps, but the fox hunter on some wind-swept, chilly ridge, motionless and alert, waits and watches until across the distant hills he hears the far tolling of his hound, carrying the warning down the echoing glades that the brown quarry was on the way. Hours of waiting in the chill winter winds for one shot at a sleek, wise, fleeing game calls for men of a strong breed. And his hound is like him, set apart from lesser breeds, granted by the red gods a sonorous voice like no other, a voice that rolls down the reverberating hills in the sweetest music known to the hunter's ear. The years seem to be bringing to an end the fox hunters of the elder clan; but, though the years be many, they will still be watching and listening for the great hound's voice down the vanishing hills that men call memory.

FOX AND GROUSE

If a fellow's best friend is the one to whom he owes his survival then the fox's best friend is the fellow who hunts him. Poultry-raisers hate him pretty cordially, I'm told, and some of them would welcome his extermination. Hunters and trappers, on the other hand, value him highly for his worth as a game-animal and as a fur-bearer. I never saw a dyed-in-the-wool fox hunter who did not rate that sport above all other kinds of hunting.

There is one kind of hunter, however, who thinks small of the fox, and believes he should be either exterminated or controlled, and that is the grouse-hunter. (I mean the grouse-hunters who never hunt foxes; most hunters hunt both, and whenever they get the chance.) He lives right up with the poultry-raiser on the grounds that the fox eats his birds. Well foxes certainly like tame poultry so, since they are good, smart fellows, it stands to reason that they also like it wild, and take it when they can get it.

But "standing to reason" is not, I think, enough. Dragging out all the memories I have of days afield, I can find but one instance of being certain that foxes kill grouse. Many days, when tramping on snowshoes, I have followed the last night's track of a fox, partly for an objective and partly to learn what I could of his doings. One day, when the weather was cold and the snow lay deep and soft, I was following a fox track and saw where he apparently had come upon a grousie which had taken shelter from the cold by plunging and burying itself in the snow. There were the remains of the grousie, and there were the tracks of the fox, complete with the signs of struggle; and there were no other tracks and no wing-prints—no trace whatever of anything but fox and grousie. If that fox did not kill that grousie, then I can't read signs in the snow—which is quite possible. The only other kills I ever saw signs of were mice, or other "small deer" dug out of the snow. Once, however, in early summer, I was sitting on the path by which a Vixen was returning home. When she saw me she stopped and surveyed me from a distance of twenty yards. She had a bird in her mouth and I took it to be a woodcock, though the distance was too great for me to be sure. But I am sure that it was not a grousie.

A man who has hunted both grousie and foxes for fifty years and who is a good observer told me that he thought, from what he knew of fox habits and fox intelligence, that where grousie were plentiful and other food scarce, the foxes probably caught them; but that no instance had ever come to his notice. He thought he had heard of trappers using dead grousie, and grousie heads, for bait, in the days when the birds were far more plentiful than now, even as they now sometimes use the heads of hens and ducks.

Turning to books, which are good to turn to when you lack experience, we find in Birds That Hunt and Are Hunted, by Blanchan. "The fox, weasel, squirrel, hawk, owl, and above all the breech-loaders are the grousie's deadliest foes."

And Seton, in Animals Worth Knowing, says "The fox is popularly supposed to subsist chiefly on poultry, rabbits and game birds; probably, however, mice form the largest part of his diet during the summer months."

There we are: The Great Divide, for, if mice form the largest part of the fox's diet during the summer months he can hardly be numbered among the grousie's deadliest enemies, for that is when the birds are most easily hurt.

The feeding habits of many animals and birds vary from one location to another and also in individuals. Most of them take whatever is easiest to get, and the easiest is usually whatever is most plentiful. Grousie are more numerous at some times than at others, but are never plentiful in the sense that rodents are plentiful; and unless very young or very old—who ever heard of a very old grousie—or taken unawares—and whoever saw one taken unawares—they can never be easy to catch. Of course the foxes kill more than we know they kill, but I doubt that they kill as many as we imagine.
AUTUMN comes to VERMONT

By HAL L. MARCH, Jr.

In many places and many lands, even though they lie between the latitudes of the four seasons, Autumn is a time of ending, a weary slowing down of nature and a somber, melancholy period of colorless days.

Not so Vermont. In its gradual metamorphosis from late summer's dusty stillness to the first gleam of snow on the hills, there appears a glorious pageant of nature, a kaledioscopic blending and fusing of all the tones of the spectrum, quickening the pulse and firing the imagination to the point where the end of summer's lazy days are forgotten in the breathtaking enchantment of the heralds of Winter.

Of itself, Vermont has not the grandeur or majesty of many of its sister states. It has a total area of only 9,124 square miles. It has no towering, saw-toothed ranges, no great inland waters, no limitless rolling plains and no bustling, teeming citadels of civilization. Vermont is a little land. Mt. Mansfield, its highest peak, only attains an altitude of 4,393 feet. Lake Champlain, its largest

Fred C. Adams
body of water, is only 125 miles long and 12 miles across at its widest point. Burlington, its largest city, has a population of only 27,686. Yet Vermont has a very definite appeal in its friendly little hills and valleys, numberless small streams and ponds, wooded slopes and upland pastures and its miles of back roads, winding through the hills to sleepy, little towns where everyone knows everybody else and can call them by their first name.

And when Autumn comes to this little land and Jack Frost spills his paint pots across the hills, there is a grandeur and beauty to the ever changing color parade which is inspiring and unsurpassed. Unlike some other sections of the country, Autumn is the most glorious season of the year in Vermont. A time of white mists and bold, blue skies, cool nights and warm days, riotous color and subdued pastels, sunlight and shadow, the fall months bring an unforgettable loveliness to the harvest season which rounds out the countryman's year.

Autumn does not come suddenly to Vermont. Early in September the first telltale signs of its approach appear. Goldenrod and purple asters sweep through old fields and struggle for predominance along the roadsides, while the fringed gentian, rare gem of flowerland, blooms discreetly on the edge of moist pasture lands. Gold vies with green as uncut meadows turn to molten lakes and last year's needles catch the sun as they drift down through the new green of the pines. A softening haze lays over the hills and dusk falls early with the scent of ripening apples and the never ending throb of the katydids and the crickets.

The nights are cool and frost comes early to the valleys. Due to temperature inversion, it is actually colder in the low places, at night, than higher up and thus the old-time farmer's desire to hang his lantern on a hillside to lengthen his productive period for crops. This also explains the heavy radiation fogs common to the valleys of Vermont in Autumn.

With the coming of October, green tarnishes and fades until suddenly, overnight, the first red maples in the lowland swamps flame with brilliant color. This is the time, perpetuated by painter and poet, when the hills of Vermont take on all the full, ripe glory which has made them famous.

In normal times people come from far and near to see this autumnal pageant of color. Vermont embraces over 14,000 miles of roads of which almost 12,000 are unpaved. In Windham county alone, where most of the accompanying pictures were taken, there are over 1,000 miles of unpaved roads. Many of these are back roads or "shunpikes," as they used to be called back in the time of toll roads and bridges, and although not built for speed, they are the perfect setting for leisurely enjoyment of Autumn in Vermont. Winding up and down the valleys, through the hills and across small, clear streams, they are as familiar with the lagging footfall as the automobile. Here is none of the gasoline scented, noisy hurry and confusion of the main highways. One can leave his car at the side of the road and walk for miles along some of these back roads with only the odor of wild apples over a rambling stonewall and the cheerful scolding of a red squirrel, high up in a gnarled old oak, for company. Overhead a benign, blue sky looks down as the yellow leaves flicker gently down, through sun and shadow, to alight with a soft whisper, among their brethren of other years.

For those who like high places, Vermont has its Green Mountains, a range running roughly up the middle of the state from end to end. Although not as high or rugged as its sister ranges, the White Mountains and the Adirondacks, the Green Mountains include about thirty peaks with an altitude of over 3,000 feet and what they lack in height and grandeur, they make up in friendliness and accessibility. Roads criss-cross this range, through its numerous breaks and passes, and for the hiker and camper the Long Trail, a 260 mile "footpath in the wilderness," follows the backbone of the range from the Massachusetts line to the Canadian border. On the slopes, heavy growths of red spruce and balsam, interspersed with mountain ash and birch, furnish a dark green backdrop for the brilliant foothills. (Continued on page forty-six)
Our earth is made up of both organic ("living") and inorganic matter. The latter covers everything that is not organic, including, of course, minerals and rocks. Most rocks are composed of either a single mineral or a combination of several: granite, for example, is composed largely of quartz, feldspar, and mica.

Now the earth's crust is solid rock, which is mostly buried under a great depth of loose, "unconsolidated" rock and rotting organic material, which combine to make soil.

Rocks are of three varieties: igneous, sedimentary and metamorphic—all formidable terms. We can best understand their relationships through the accompanying diagram. Note at the top of what is known as the "rock cycle" are the igneous rocks—that is, those formed as a result of the cooling of what was once a molten mass. Geologists believe that at one time the entire earth was such a molten sphere, and that as a result all rocks were originally "igneous." Sometimes great masses of this basic rock are revealed by "erosion" (the wearing away of the looser surface covering); these are known as "batholiths." The great outcropping of granite—probably the most common igneous rock—are characteristic of this structure.

On the one hand (moving to the left on the diagram) this igneous rock can be altered by erosion into "unconsolidated" sedimentary or loose matter—like sand, gravel and clay. Sediments, in turn, were washed down and deposited layer upon layer upon the ancient sea bottoms. Pressure and the action of natural cementing materials consolidates this loose matter into familiar rocks which are laid down in layers, or "strata." Clay, for example, is compressed into shale; limestone and dolomite largely result from consolidation of the skeletons of millions of living organisms.

But we can proceed one step further, for these sedimentary rocks can be made over—"metamorphosed"—by more pressure, heat, or chemical action, until they are known as "metamorphic" rock. Our great deposits of marble, for example, are made-over limestone. Note how the great belt of marble down the west side of the state flows out of—and is for some distance paralleled by—a great strata of limestone which begins way up at the head of Lake Champlain. In fact, some of our so-called marble are merely limestone and dolomite which will take a beautiful polish.

Likewise, slate is nothing but "metamorphosed" shale; the best deposits of which run along the Vermont-New York border, with important quarries on both sides. There is another, less important stratum of Memphremagog slate in the center of the state, stretching through Montpelier, Berlin and Northfield. A third, of little commercial importance, today follows the Connecticut River north from Danverston.

But just as igneous rock can be washed down to sediments, and then consolidated again into metamorphic rock, it can also be transformed by pressure directly to this latter form (follow the arrow to the right, from the top, now). And it should also be noted that sometimes either kind of rock can be eroded back to a loose state, (note the arrow moving clockwise from the bottom of the circle and also across its center).
The close of the Ordovician period marks the end of the depositing of sedimentary material, but the beginning of strong disruptive forces in the earth's crust which were to re-make the map of Vermont. The uneasy earth, trying to adjust itself to a shrinking mass, wrinkled again. Strong pressure from the east thrust upward the Taconic Mountains, and in the Champlain Valley produced the unusual “overthrust,” which extends from Canada all the way down the east side of the lake in the red sandrock hills. Here the pressure was such as to thrust the older Cambrian layers up over the younger black Ordovician shale. This is, of course, a shift in position, since the newer layer will normally be on top of the older. The overthrust is beautifully exposed at Rock Point, where geologists come from great distances to examine its structure. A mural of the overthrust, accompanied by panels depicting the human history of this region, has been painted at the Fleming Museum in nearby Burlington (see the color illustration above).

There followed a period of great mountain-building, when the peaks of the Green Mountains were raised to great heights, and its rocks subjected to great pressure (and consequent metamorphism). But cracking and crumpling of the earth’s surface were not the only forces at work. What was once a nearly tropical climate (as shown by fossil deposits of tropical fruits and nuts) underwent a revolutionary change. As it became colder a great ice sheet began moving down from the north, covering most of Canada and northern United States. That which covered New England had originated in Labrador, and in its southward movement brought many Labrador rocks with it, crushing and grinding the softer ones, rounding and polishing the harder ones. Mountain tops were shorn off, valleys gouged out, and the soil scraped from its rock base. At its maximum depth, it covered the highest peaks of the Green and White Mountains.

One of the most important products of the glacial period, however, was the soil which overlies almost all the rugged face of Vermont. For Vermont was more fortunate than her eastern neighbor, New Hampshire, who had her White Mountains scraped almost clean. Yet even the high peaks of the Green Mountains are wooded to the top.

The glacier crushed to the earth all living vegetation and left it there to rot amongst the ground-up, loose rocks. A soil of great fertility was thus produced over much of the state, and a new carpet of green spread over the land. Trees, the greatest free-growing natural resource, sprang to great size, and dropping their leaves upon the ground to rot in turn, provided a ground cover of unbelievable fertility, as well as the lumber for the pioneer builder. These great forests were a hindrance to agriculture in that they had to be felled and the stumps up-rooted to prepare fields for the plow. But they were also, when burnt to ash, the source of the first important cash crop—potash. This was exported by the early settlers to Canada and the more settled areas of southern New England.

The rotted leaf cover proved a deceptive fertility for the unscientific frontier farmer, who soon “mined” his soil and moved on westward, leaving in his train a heritage of abandoned farms and declining population. The soils
are not very heavy, and with the exception of the fertile river intervale—meadows—are best suited to grass. The abundant summer rainfall, transformed in winter into a snow cover, produces a luxuriant grass cover, well suited to grazing. The determined farmers who did not emigrate recognized the decrees of nature, and turned to livestock—sheep, beef cattle and horses, and finally, in our time, to dairying. Vermont's past and present success in agriculture has hinged upon her ability to turn grass into a saleable product. Today the most profitable product is fluid milk.

In the course of these several paragraphs, we have climbed over numerous complicated words and ideas. But it has all been to the end that the reader may better understand the tremendous influence of natural history on human history—of geography and geology on industry, agriculture, transportation, and indeed, upon recreation.

We have seen how the soils and climate of Vermont have determined the extent and kind of crops which the farmer will raise, and to a great extent, how he will raise them. In addition to grass and agricultural crops, the natural forest cover has today provided the source of not only an expanding wood-working industry, but also Vermont's famed maple products: sap, syrup and sugar.

We have seen how the basic geology of the state has provided her with important mineral resources, upon which are built two of her greatest industries: marble and granite quarrying and shaping. Slate and limestone, copper and asbestos, Verde antique and talc, are other minerals which are mined extensively within Vermont.

Then, too, basic geography has fixed the routes of travel within and across the state, whether by foot, horse, rail or road. And upon transportation there are dependent many other manufacturing industries.

And last but not least, her marching mountains and placid streams in a verdant landscape have—coupled with the appeal of a substantial way of life—brought to Vermont a great influx of "outsiders"—people touched with the green finger of country living as well as tourists just "passing through." And in these visitors she has found not only a great new industry, but also a new source of population and expansive energy.

This, then, is the story of our natural history, and the prelude to our human history.

Vermont's mountains and green coarsed valleys were once thickly clothed with a cloak of timber, the state's first and most available natural resource. Today, while almost all the "first growth" is gone, through the work of the national and state forestry services a program of conservation endeavors to preserve the new cover for generations to come.
Second only to the physiography of the state in long run importance is climate, another element in her development which has been under the sole supervision of Mother Nature. Vermont's northerly position dictates a temperate climate, modified locally by the elevation of the landscape. Note on the accompanying maps, how closely maximum average temperature and maximum length of growing season—as well as minimum snowfall—is concentrated along the lower regions of the Champlain and the Connecticut River valleys. Coupled with an excellence of the soil, this fact makes these areas particularly adapted to profitable agriculture. It can hardly be disputed, however, that the general shortness of the growing season has handicapped the Vermont farmer in competing with more southerly areas.

While Vermont is reputedly a cold state—and winter temperatures below zero are frequent—humidity is low. The absence of excess moisture in the air provides an exhilarating atmosphere as contrasted with the damp penetrating cold of the seaboard. This, combined with the heavy snowfall on the mountain slopes (again, see map) has produced the expanding new winter sports industry, which is rapidly turning Vermont into a year-round recreation area, serving the metropolitan East as well as her own residents. A moderate summer climate together with the attractions of her verdant landscape long ago produced an extensive tourist trade in the warmer months.
Autumn Comes . . . Continued from page forty

People ask “What causes the fall colors and why do they seem more brilliant in Vermont?”

Frost has always been called the master painter of Autumn. However, in recent years science has attempted to prove that fall leaf pigmentation is nothing more than a ripening process, like the turning of a tomato or a pumpkin. They say that as the flow of sap slows in the fall, leaf processes also slow, the green fades and is replaced by foreign, mineral pigments brought up from the soil. They say that the leaves would color, Jack Frost or no. Very probably this is true and yet it does not entirely explain why in an unusually warm fall the leaves never achieve real brilliance or why red maples are always red and birches always yellow, regardless of their habitat. Perhaps the scientists are right, but Jack Frost gets the credit in Vermont.

There are several reasons for Vermont’s high place in the Autumn parade. Vermont has a total forested area of approximately 3,427,000 acres, or about sixty-four percent of the total area of the state. About fifty percent of this growth is hardwood, with the green conifers and deciduous softwoods vying for the rest. Vermont lies in the heart of the northeastern hardwood belt of beech, birch and maple as distinguished from the central hardwoods of oak and hickory. Although the oak is a pretender to the throne of color, with its shining maroon and claret, it is outclassed before the vivid yellow and russet, orange and gold of the more prevalent northern hardwoods.

Among the softwoods, the red maple brings every known shade of red to the Vermont hills, while the white pine and the spruce furnish the contrast.

Several Vermont shrubs are indigenous to autumn coloring, including the staghorn sumac, dogwood, black alder, witch hazel and bittersweet among the better known.

October brings to Vermont its most consistently fine weather. Mist ghosts ride the river trails at dawn but soon disperse beneath the warming hand of a benevolent sun. Deep blue are the skies and rain comes seldom, if at all. Clear is the sound and the space and there is a spicy tang to the air, a scent of ripe apples and frosted hills, woodsmoke and burning leaves. The countryside lies serene and peaceful under a patchwork quilt of riotous color and, although the summer birds have mostly gone, a bluebird lingers to call softly from an old thorn apple, while the bluejays troop noisily through the beeches and the downy woodpecker pounds out a practice tattoo on a new found hunting ground.

In October the hunter has his day. Although deer hunting does not come until November, partridge and woodcock abound in upland covers and small game are plentiful enough to furnish an excuse for an outing in such a month. Powder smoke drifts through the yellow tag alders while the mellow roll of the smoothbore reverberates from flaming ridge and old, abandoned orchard. At night the coon hounds bay under a golden moon, with its promise of corn shocks and pumpkins, butternuts and winter squash.

For the farmer, October is the harvest month. There are apples to pick and pack, potatoes to dig, vegetable cellars to fill with cabbage, carrots, beets and squash and perhaps a barrel of cider to help take the sting out of the winter wind. Although Vermont is not numbered among the largest commercial producers of fruits and vegetables, it does produce over two million bushels of apples each year, of which the greatest portion is the justifiably famous Vermont MacIntosh.

To the farmer, October means the fruition of all his summer’s labors and, in these times, fortunate indeed is the man who can look upon a well filled cellar and barn and say “We’re ready. Let ‘er snow.” Even the field mice begin to move in, out of their summer runways beneath the friendly grass, to take advantage of all this wealth of produce and the grey squirrels are hard at work harvesting their own particular crop of acorns, beech nuts and wild apples, much to the disgust of the irresponsible and irrepressible red squirrels.

Only once is there a pause in the rapidly passing pageant of Autumn. For a few, short, magic days, usually in mid-October, time turns back and once again it is Summer—Indian Summer. For all too short a while, nature stands still and warm, lazy days, filled with the drug of beauty and the blue haze of distant forest fires, lull the unwary into a somnolent forgetfulness of things to come.

But the crows know better as they move slowly down out of the hills to the rivers, stopping now and then to chastise a hapless hawk or owl. The farmer, his harvesting done, goes about his annual preparation for Winter, banking the house with leaves, putting away his summer implements and cutting his winter supply of wood. Soon the vivid colors begin to fade. Red turns to russet, gold to brown and each day the pattern of the trees is more clearly visible, through the thinning leaves. And then, one cold, raw morning, there is a mist of ice across the hilltops and it is November.

Thanksgiving comes and goes, a brief interval of rest and reflection in the endless round of the countryside’s year. Then is the time when the wild geese, wily old navigators of the high places and the last to go, stream south under the pale, green northern lights. Riding the north wind just ahead of King Winter’s silent hordes, they are sometimes a little late and there comes a grey, cold night when, quietly and softly, the first snow falls on Vermont.
similar organizations in the United States. A large section of the famed "Willard Collection" of classic and medieval architecture and sculpture has been placed on indefinite loan at the Barre School of Memorial Art.

The American Museum of Natural History in New York has spent some little time studying the geology of Barre granite, Dr. Frederick H. Pough, Curator of Physical Geology and Mineralogy at the Museum, is a renowned authority on geology and a world famed student of volcanic activities. When I interviewed my good friend at the Museum recently he read me a paragraph or two from his recently published essay on Barre granite. Here is a typical passage:

"Once Millstone Hill was even higher," he began, "but the great Ice Sheet crushed down from the North, smoothing off the surface and drowning the valley below in a sea of sand and rocks. Today it stands above a plain of glacial deposits, its summit scarred by Ice Age boulders and dotted with the quarrying equipment of the men who wrest from the quarries the rock that withstood the weight of a thousand feet of ice and the grinding of a million boulders.

"Barre Granite is composed of a little mica; gray feldspar, a potash aluminum silicate and the rest a soda aluminum silicate; and the most resistant of all common minerals—quartz. Quartz is pure silica, gray to white. The little black iron mica (biotite) gives Barre Granite its punctuating sparkle on the surface. The color of granite depends principally upon the feldspar. Feldspars of granite vary from dark gray to white or pink. Together these three minerals—quartz, feldspar and mica—make the Barre Granite of medium gray in which we can see the variously colored grains when we look closely.

"Each grain is crystallized, the crystals having been formed when its molten substances cooled and solidified slowly in the depths of the earth. This interlocking mesh of crystals gives Barre Granite its uniformly granular texture, both hard and durable.

"Because of the structure of granite, it is seldom blasted in quarrying. For blasting would shatter the rock, while breaking it away by other means brings forth the pieces in block form.

"In quarrying granite, a series of holes is drilled first in one direction and then others are drilled at right angles to the first. Wedges driven into these holes break loose the block. Huge hoists lift out these chunks of granite and start them on their way to their various processes in finishing.

"This does Barre Granite, stone of ageless beauty, come from the mountain to make permanent memorials dedicated to mankind."

The granite industry itself is organized as The Barre Guild. It is a guild patterned upon the ideals and objectives of the medieval artists and artisans who organized for the purpose of establishing and maintaining certain principles and standards. The guilds in continental Europe were largely responsible for the surpassing excellence of the medieval arts and crafts.

"Like its predecessors in the Old World, the Barre Guild tolerates no compromise on quality standards. The hallmark of the Guild cannot appear on any Barre-made memorial which has not been officially inspected by experts. These men are retained for the sole purpose of guarding against flaws and faults.

Vermont takes solemn pride in the fact that the heart of her hills has brought the consolation of commemoration to millions on this continent. In cemeteries and churchyards, on our battlefields and community centers, the public and private memorials produced in the "memorial art center of the world" are permanent tributes to the dead and a permanent source of inspiration to the living—and to generations yet unborn.

BARRE . . . Continued from page 29

contrary view will turn up later. In other words, "the views expressed are those of the author, and should not be construed as representing the attitude of either the editor or the Commission." (We learned that in the Navy.)

Now, let's be frank. As we said in our first issue, the magazine has a double function. One is educational—to inform Vermonters themselves of the opportunities at home. The other is to inform people elsewhere of the attractions of the state. If we successfully fulfill the latter function, there'll be a bit of modest back patting involved.

But we think it will be a modest amount. The Rutland Herald, in looking over our first issue, said many kind things, but did think it was a little heavy on the "plogs." It was a good criticism, and one we've tried to keep in mind. We have in the forefront of our mind the publicity of some of our sister states of the deep South and Far West, which frequently, with "cheesecake" and high flung superlatives, seems to become inebriated with the exuberance of its own verbosity. This is a sort of thing we want to avoid—though will not say that it isn't the right thing for what they have to sell.

But if Vermont is selling anything, it's a way of life. In fact, we phrase it, "Vermont is a Way of Life." Even more than the travelers who come to taste the splendor of our green clad landscape, we want to interest substantial—no, we don't necessarily mean wealthy—people to whom Vermont looks like a good permanent place to live and make a living. So we want to tell them how Vermonters live and work, as well as describe the lay of the landscape.

Vermonters, habitually, are given to understatement. Yet in the welter of words hurled at us through press, radio, movies and every means that the hucksters can conceive, there is good reason to believe that a quiet voice may receive more attention. We'd wager that Vermont received more long-run "publicity" from that Yankee master of understatement, Cal Coolidge, than from any of its more vocal advocates since.

This is perhaps as good a place as any to emphasize the word story in our Picture Story Contest. You can tell a story in several ways: by a couple thousand words of text and several pictures, or by a series of pictures which—with brief captions and perhaps a hundred word introduction—tell the story themselves.

(See "Trail Ride" or "Rural Schoolteacher" in this issue). But isolated and unrelated pictures—even if they number Continued on page 48
four—do not qualify under the contest. We are always glad to have unusual and striking single photos—color or black and white—submitted for consideration. And probably beginning next issue we will open a “salon” section, where individual pictures can speak for themselves—and for Vermont—without the need of a story. But it’s picture stories—of either variety—wanted for the Contest.

You should also keep in mind, as regards the Contest (and all contributions, for that matter), that we work a year ahead on every issue. We have to—you can’t, for example, take winter sports pictures for a December first issue any other time except the year before. This seasonal angle, plus the fact that we are a quarterly, means that things often do not appear until long after submission or acceptance. If you submit a picture story on winter sports in October, or January, or March, it cannot be considered for the contest until the next September 1 (for that winter’s issue). Closing dates are the first of March, June, September, and December (but preferably before those dates), for, respectively, the summer, fall, winter and spring issues.

While we’re on the subject of color pictures, we might as well be a proper wet blanket. The fact is that the most popular size of color film—35 mm.—is really too small to enlarge and reproduce well, unless very sharp. (Although the prize-winning Winnick Kodachromes were 35 mm.). Up to date the larger sizes could be taken only in Kodacolor, which is not at all adaptable for our uses, or in sheet film, which is costly and unwieldy for the average amateur. But Ansco now has out, in the popular 620 size, a roll color film that produces a 2 x 2 or 2 x 3 (according to the camera) transparency. For cover work, though, the 4 x 5 size is best.

In black and white photos, size doesn’t matter so much. 8 x 10 or 5 x 7 are best, but above all, they should be sharp, glossy prints with good contrast.

We suspect, by now, that it may be our readers who are uneasy, rather than the editor. But before signing off, a few announcements, please.

(1) We cannot supply copies of back issues; there just aren’t any.

(2) We cannot make temporary “summer” changes of addresses. Our summer issue will normally be out early in June—before most people hike off to summer homes—and the Fall issue comes in September, after most have returned. Since the post office will not forward second class mail, many of our subscribers would lose copies. Permanent changes should be in our hands a month before the issue with which it is to take effect.

(3) Many people have inquired about the possibility of issuing the magazine as a Christmas card. When the supply is adequate, we can furnish it in bulk (20 or more) at a little saving from the single copy price—29 cents instead of 35 cents. Guess that’s enough for now.

Earle Newton

Continued from page 10

FAIR  

must suffer through vicissitudes if they are to survive with roots of strength. It might accurately be said that the Society was practically defunct at the time of its reorganization in 1910. Then, Frank M. Wilson of the Wilson Clothing Company and Will L. Davis, Rutland City treasurer, headed a group which, through sound planning and skilful enterprise, changed the bookkeeping figures from red to black and launched the Fair onward to 37 years of continuous and growing progress. This group of 20 men headed by Wilson and Davis individually endorsed a $2000 note to be held for use against any obligations the Society could not meet from current earnings. It is significant, and a tribute too, that this note was never utilized, and that from that period of deficit the Society has acquired assets well in excess of $100,000, with no liabilities.

Carleton Wilson has now stepped into his father’s shoes as the Society’s president. Will L. Davis passed on in 1946 but his daughter, Madeleine Davis, continues his interest and enthusiasm as assistant treasurer. Arthur B. Porter, secretary and manager, is the guiding hand of management and to him must be given much of the work-a-day credit for the more recent of the succession of successful years. Mr. Porter came to the Society in 1942 after many years in Rutland with an investment banking concern. He is, of course, responsible to the Board of Trustees presently composed of Lloyd E. Aldrich, George E. L. Bedlam, Dan D. Burditt, Jr., Stephen C. Dorsey, Aldace W. Newton, Charles G. Noyes, and Carleton Wilson, ex officio.

Resulting from their combined efforts, the Society has paid for physical improvements from earnings only in annual amounts from $5000 to $70,000 (this latter figure in 1939 when the new grandstand was constructed) and annual receipts have been in excess of $140,000 with net annual profits (1946) approximating $24,000. In contemplating this 37 year record, it must be considered that the Society is a non-profit institution.

Such a record by such a group of men for a non-profit purpose must, and does, speak for the character of the Society itself; indeed, for the men themselves—if not for the Vermont character. In fact, the very essence of the Rutland Fair is typically Vermont. Its people and its visitors seem to become imbued with Green Mountain spirit, as do our maple syrup with their sap, our fields with their milk—giving richness and our men and women with their free thinking.

End
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