A FAIRLY LARGE BARN AND

a wagon shed, flanked right and left by attached corn
cribs, both built of logs and roofed with oak shakes, came
as original equipment with the farm. As a boy of about
four, I once climbed into one of the cribs and, with com­
mendable intentions, tossed two or three bushels of corn
to half a dozen fat hogs, already well fed, in an adjoining
pen. This did no real harm, but it made some extra work
for Dad, who had to retrieve the over-generous ration of
ears. I was given a deserved reprimand, but it was mild,
befitting my tender years and the relative harmlessness of
the offense. Just the same, it was effective; never again
did I overfeed any stock.

After using these primitive buildings several years, Dad
decided to build a new frame barn to replace both. At
that time a good barn was very important on all farms.
Some farms now, having no livestock, need little or no
barn space. On many others, barns are still indispensable—
they increase the earning power of the establishment.
This explains why one sees occasionally a farmer’s family
living in a small, dingy house while nearby is a large ex­
pensive barn. In most such instances the owners are count-
ing on that barn to help earn money that later on will provide a better home and a better living.

We had only a few trees suitable for lumber, but Dad's brother, Uncle Cal, had a large wooded tract. With a bill of materials made out by a carpenter, the two set to work that winter with axes and saws, felling trees that would yield the needed lumber. They snaked the logs together, and, when the snow was deep, loaded them upon bobsleds. They hauled them to a sawmill, marking all with red kiel for identification and to indicate dimensions in which they were to be sawed. I was permitted to watch this work at times, all very interesting, for both were skilled woodcraftsmen and experts at using horses for getting the big logs from the woods to the mill. The sawed lumber was piled near the building site. A shingle mill was set up nearby, and shingles for the roof were cut out of clear white oak.

Early in the spring the foundation was staked out, and field stones, large and small, were put into holes dug for them. Above the ground the stones were carefully laid up and leveled to form foundation pillars. In this way all of the boulders that had accumulated on the farm, and some from a neighboring farm, were disposed of.

Carpenters cut framing timbers to length, chiseled out rectangular mortises, formed tenons, and bored holes for fastening pins. Pins of stout hickory were split out, shaped, and pointed. Sills were laid in place on the stone pillars and pinned together. On the sills other timbers were placed and pinned together in "bents," each bent being so placed that it would be reached in proper order when the structure was raised.

Then came the "barn raising." Several neighbors were on hand to help. The professional barn-raiser came with his
spanking team of horses, ropes, blocks, sledge hammers, and pike poles. With his team he raised the "gin pole" to an upright position. This was a strong wooden pole, tall enough to hoist the topmost part of the frame, with ropes and pulleys fixed at its top. It was secured firmly in place by guy ropes. Ropes running over pulleys at the top of the pole were made fast to the first bent, and the horses, pulling at the end of a rope, brought it to an upright position. While men with ropes and pike poles steadied it, temporary braces were nailed on to hold it plumb. I was about five, too young to understand fully, but I was thrilled by this and succeeding operations, all of which I watched, wide-eyed, from a safe vantage point. The second bent went up in the same manner, but it had to be raised more slowly because crossbeams, braces, and nail ties had to be inserted in their places in frame members as the bent approached the perpendicular. When it stood upright, wooden pins were driven in so that beams, braces, and ties held as a unit the two bents now up.

The remaining two bents were raised and secured in place in the same manner. After this the plates (horizontal eave beams) were hoisted into place, their mortises fitting the tenons of upright posts and braces. One of these plates ran along at the "square" at either side, the full length of the barn. They were fastened to the posts, carpenters walking over them and driving in pins with their adzes.

The final operation was to hoist the two purlin plates. They ran lengthwise of the building and were supported by posts and braces so that they came midway between the eaves and the peak of the roof to be. As one-piece timbers of sufficient length could not be obtained, two beams were spliced and pinned together to form each
purlin, as well as each eave beam. When the purlins were in place, the carpenters, walking catlike over the sharply inclined faces, drove in the fastening pins. To me this was an exciting, daredevil feat; but to carpenters, as to structural steel workers, standing and walking over slender supports high above the ground are commonplace, all in the day's work. To do it successfully one must have a good sense of balance, complete freedom from acrophobia, and must have accustomed himself gradually to working in such positions.

My father had an abnormal fear of heights that he was never able to overcome altogether. He told me that in his youth he once climbed a ladder to the second floor of a building under construction. Looking down, he became panic-stricken and at once started to descend, crawling slowly, snakelike, over the ladder, desperately gripping each round. I once talked him into going with me via elevator to the top of the Washington Monument. The experience proved anything but pleasant for him. He remained tense and ill at ease until the elevator returned us to solid ground.

Early frame houses were framed much the same as this barn. Their timbers, however, like those of the first frame barns, were hand-hewn, not sawed. Groups of men using ropes and pike poles, raised them into place, fastening joints with wooden pins.

When the last timber of our barn had been hoisted and pinned in place, the gin pole was taken down and loaded with ropes, blocks, and other equipment for transfer to the next job. The raising was finished, but the carpenters' job was then just well under way.

They had to hoist the rafters and nail them in place, apply the rough vertical siding boards to the outside of the
frame, and close in the gables to the peak of the roof. Just below the peak they put in a 4 by 4 inch track, full length of the building, on which was mounted a “car” for carrying hay into the mows. The track was made of oak dressed by the carpenters, and was supported by steel rods secured to crossties nailed to the rafters. Next, roof boards, spaced for five inches “to the weather,” were nailed to the rafters, and the oak shingles were applied.

Partitions, mangers, and feed boxes were put in for a milking room equipped with stanchions for eight cows, single stalls for six horses, and, opposite these, two large box stalls. The latter were used for mares with young foals, for young calves, or for ailing animals. Heavy oak floors were provided for all areas to be used as quarters for animals. No water was supplied inside the barn.

The floor level of the 48 by 72 foot barn was about two feet above the ground. Earth fill retained by rough stone walls provided approaches to the wide side-entrance doors that opened to the threshing floor, which was about twenty feet wide and open to the roof, extending crosswise through the building at its center. This was a floor designed to support a heavy threshing machine, as it did a number of times when our grain, in sheaves, had been stored in the mows that occupied the upper story at either side. At haying time wagons loaded with hay were driven onto this floor for unloading. There, also, a baler was set up now and then to compress surplus hay into bales. This machine was powered by two horses, hitched to the long lever of a mechanism known as a “horsepower,” walking in a circle outside.

The threshing floor was covered by two plies of wide elm boards, as were the wide bay adjacent to the milking room (used for storing machinery) and the feeding alley.
between the single stalls and the box stalls opposite them. The mows were floored by a single thickness of elm boards.

As an afterthought a few years after the barn was put into use, a space four feet wide was partitioned off from the machine-storage bay to be used as a corncrib. In case bad weather set in before field husking was finished, we snaked in several shocks of corn on a sled and set them up on the floor of the bay. We could then husk at our leisure, unmindful of howling winds, snow, ice, and low outdoor temperatures, and feed fodder as well as some of the corn directly to livestock without additional handling.

With the exception of the big side doors and the ventilating louvers set into outside walls (all made from commercial white pine), every stick in the new barn came from native timber. The same was true of a chicken house, built about the same time. A new smokehouse, a granary, and a buggy shed, with a big corncrib at either side, all had native timber frames, commercial products being used only for roofs and sidings. About 1910, a second, slightly smaller barn and a wood-stave silo were erected on a site 150 yards from the first barn.

"Paint" made by stirring Venetian red into crude oil (as petroleum was commonly called) was applied to the rough oak siding of the first barn. This was intended to do little more than color the boards during the weathering process. It served that purpose fairly well. Years later, because wide cracks opened between the boards, all were ripped off and matched commercial siding was put in their place. This was coated with factory-made red paint.

The oak shingles proved unsatisfactory. Probably, they would have done much better if more time had been allowed for drying and seasoning before they were put on. The wider ones curled badly after a few years; then winds
whipped them off, and leaks developed. At length, after repeated patching, Dad bought standing-seam galvanized steel roofing and rented a set of tools for applying it. A brash fellow of about eighteen, I set about putting the new roof over the shingles, working altogether alone. I got the job finished without accident, then installed rain gutters and downspouts, previously omitted.

The overflow of machinery from the barn bay, including generally the binder, mower, hay rake, plows, cultivators, harrows, etc., was stored in a building separated from the barn by a wagon driveway. In this building we also had pens for sheltering and feeding hogs, with a storage loft for corn above them. Our straw was always built into a stack near the barn, at its leeward side. Usually, we had a pole structure in the stack, straw being piled over three of its sides and its top. This enclosure provided winter protection for livestock—as a rule, cattle only.

Not long after we got the new barn, Dad and Uncle Cal cut logs and got out lumber for the frame of our new house. Most of the men who worked on the building ate with us at the family table, as was generally customary at the time (the barn workmen did too). Some even had to be provided with beds. The plasterer, with his Negro helper, ate and slept at our house until all of their work was finished. They started early and worked late every day. Once, about an hour before dawn, the boss aroused his assistant and bade him hurry with his dressing. The young man shortly appeared, yawning and rubbing his eyes. Noting the darkness outside and the steaming breakfast on the table, he exclaimed: “Man! Two suppahs in one night!”

Unlike our sister of preschool age, we boys never knew just how we got moved from the old house to the new.
One morning we ate breakfast and dressed in the familiar home surroundings, then went to school. When we returned, we found the furniture arranged in a strange, alien sort of house, new throughout and smelling of new wood, paint, and varnish. This house, with eight big rooms, provided a generous amount of living space. There were improvements and advantages that we did not have before. Likewise, as we discovered with the passage of a little time, there were some disadvantages.

As winter came on, we noted that it was not as warm as the log house. As in all frame houses built at the time, no sheathing was applied to the outer walls; the weatherboarding, of dressed, matched lumber, was nailed directly to the studs. No one had yet thought of using building paper or other insulation in houses as barriers against the transmission of heated air. In the lower rooms floorboards were nailed directly to the joists, without subfloors or flooring felt. Since there was a large volume of unheated air under them, the floors were always cold in winter; the stoves we had could not keep them warm.

There was a big volume of attic space above the upstairs rooms, but this had no noticeable effect in preventing the loss of heat in winter. In summer the attic air absorbed the sun’s heat, which radiated freely to the rooms below, not only in daylight hours but during much of the night. My brother and I stoutly maintained that our upstairs room was the hottest in the house in summer and the coldest in winter. Probably it really wasn’t, but no one seemed to think it worth while to argue the matter with us. Some breezeless nights in midsummer were so hot that, after sweating wakefully in bed a while, we had to give up and stretch out on the floor of the room below that, shut off from attic heat, was comfortably cool.
Going to bed in winter seemed to us at times like an expedition to the Arctic—there was no heat in the stairway, the long hall, or in any upstairs room. A thick layer of blankets and comforters was provided for our bed, but it happened rather often that one or the other of us would unconsciously roll himself into the lion's share of the covers, leaving his partner chilled and wakeful. This naturally was conducive to some rather tart exchanges. Getting up in that frigid room was an ordeal that we would have always postponed indefinitely; but it was a fairly strict family rule that all must be on hand when breakfast was ready, usually not later than six A.M. throughout the year.

The roof of the new house, of rather steep pitch, was covered with slate shingles. Always, after five or six inches of snow had piled up, it would avalanche to the ground. The accompanying roar was quite startling at first, but we gradually became accustomed to it and finally came to pay it little attention. It is a wonder that no one was ever buried under a big slide.

This fault of the roof was fully offset by qualities that kept water that fell upon it quite clean. All roof water was stored in a cistern with a pump, near the house. It was a great satisfaction to have an ample supply of clear, soft water—no more rain barrels with their attendant mosquitoes. A good many years passed before anyone thought to pipe cistern water to a pump inside the kitchen, with convenient sink and drain.

Like most of our neighbors, we now had a big parlor. Here were our best carpets, our best furniture, and a bookcase-desk in which reposed our best books. In a prominent spot was our parlor organ. The reed organ was then commonplace in farm homes, but there had been a time,
about a generation earlier, when it was something of a status symbol. A story was told of an unwashed old fellow in the region who, after buying one, remarked to neighbors that in those times “everybody who is anybody just about has to own an organ.” This gave rise to no little merriment, for the man was widely regarded as an inept, lazy incompetent, rather low on the totem pole.

On a center table in our parlor was a large family Bible with space for all vital family records and with the names of my father and mother printed in gold letters on its embossed leather cover. A similar Bible was to be found in almost every other home in the community. Near the Bible lay several photograph albums and a stereoscope with an assortment of stereo photos. There stood also our biggest, most expensive lamp, not unlike lamps in numerous other homes. All of these ornate lamps had tubular wicks to increase the air supply to burners. Since all tended to be cumbersome and more ornamental than useful, they were generally used only on festive occasions.

For years kerosene lamps provided the only illumination in farm homes. Candles were passé—we never saw them used except on Christmas trees. Cleaning chimneys and burners of lamps and lanterns was an unpleasant daily chore. Not even the best oil lamps produced light that was altogether satisfactory for reading or close work. In time, wick-fed kerosene lamps with incandescent mantles appeared; they gave good light. Some preferred them to the acetylene and gasoline lamps that were gradually coming into use, considering them handier and safer.

Acetylene lamps, for some time the best available for automobile lighting, were used only to a limited extent in
homes. Some rural churches had acetylene or gasoline lighting plants, generally with complicated systems of pumps, generators, valves, and piping. When they worked, they gave excellent light; but they were not altogether dependable or predictable.

A few families, including one near us, installed small electric systems specially designed for farm lighting, with low-voltage generators driven by gasoline engines and generally with batteries for the storage of current. They served well when in good operating condition, but at times the lights would flicker, then wane to a mere red glow. Occasionally, they failed altogether just when they were needed most.

At times men and boys might have voted lanterns fully as important as lamps. They were indispensable in the short days of winter when chores about the barn, consuming about an hour each morning and each evening, had to be done. Every family had one or more. A lantern was always carried when one went anywhere in the neighborhood at night, to avoid mud puddles, snowdrifts, or obstructions.

For several years our parlor was used only when we had parties or special guests. Gradually it came into more general use, and eventually it was thrown open to become essentially an annex of the living room. This change was encouraged by the installation of an improved stove in the place of the woodburning "Round Oak" heater. The new stove was a "base-burner," so called because the anthracite coal fed down from a hopper at the top and burned at the base of the firepot. It gave a cheerful aspect to the room day and night, because glowing coals and
the lambent flames were visible through mica-covered openings in doors on three sides. It radiated a great deal of heat, but it had little effect in warming floors.

We also set up in the kitchen a new range made to burn either wood or coal. Its reservoir for warm rain water was larger than that of the old stove from the old kitchen. Its oven threw out a great volume of heat, a perfect place for warming cold feet and a powerful temptation to put off doing outdoor chores in winter. Near this oven plants for the garden were started in early spring. There also, occasionally, frail baby pigs, lambs, or chicks, snugly wrapped in blankets, basked in comfortable warmth until they became strong enough to cope with conditions in the outside world.

A few steps from the kitchen door we built an upground cellar, its inside arrangement similar to that of the old milk house; also, a building that served as combination summer kitchen, woodshed, and laundry. Every spring Mother moved cooking utensils into this building and did all cooking there until cold weather came. Almost every farm had a summer kitchen at the time. The object was to keep the main kitchen, which usually doubled as dining room, cool and free from cooking odors. The arrangement was also supposed to reduce the fly nuisance.

Few country people had known much about gasoline until, almost overnight, gasoline kitchen ranges came on the market and quickly caught the public fancy. A man in the neighborhood made a swap and got one of the new stoves for his wife, one of the first to appear. "Sure is funny," he reported, "to see her a-standin' there, a-cookin' without no fire."
Mother bought one and had it set up in her summer kitchen, to be used there only. No one ever quite overcame the feeling that the thing was a little dangerous, the volatile fuel being stored in a tank near the burners, to which it flowed by gravity. A decade or so later kerosene-burning ranges crowded the gasoline stoves out completely. The transition, which came within a short time, apparently was induced by the belief that kerosene was the safer fuel; at the time the price differential was too small to be important.

A well drilled at a point convenient to both the summer kitchen and the house tapped a good supply of water at a depth of sixty-five feet, forty-five feet in the bedrock. Surface water was “cased off” by a pipe driven down thirty feet. The water was cold and clear but quite hard, with a pronounced sulphurous taste and odor. Some in the community would have called in a “water witch” with a peach-twig divining rod to tell them where to drill, but dad took no stock in divination. He and Mother simply decided that a well would best meet requirements at a certain spot, and there it was sunk. No doubt drilling to the same depth anywhere else on the farm would have been just as successful. Furthermore, regardless of its location, the well in all probability would have yielded sulphur water, for water from most drilled wells thereabouts contained some sulphur compounds.

Until about the time this well was drilled, the water supply of most farms came from “dug” or open wells, walled with brick and provided with wooden covers. In most cases the water was clear, cold, and tasteless. No doubt most of it was pure and safe for drinking, since it
flowed in from sources deep underground. But such wells were readily subject to contamination from surface sources. Doubtless, contaminated well water was responsible for many of the cases of typhoid that occurred.

Occasionally at threshing time as much as 1,000 gallons of water were pumped from our old open well within a few minutes. This never lowered the water level perceptibly. After years of hand pumping, we erected a steel windmill over this well. It saved a great deal of time and labor because even a light breeze would keep the pump going, supplying water to slake the thirst of our stock, really prodigious during much of the year. At that time wooden windmills for pumping water and, in a few instances, for grinding feed, dotted the landscape; but all new mills that appeared were made of galvanized steel.

A neighbor had an open “gum” well in his woods to supply water for his cattle. The gum was a hollow sycamore log with an inside diameter of three feet, set twelve feet into the ground. The well was fed by water that seeped in from the surrounding undrained soil. Hollow sycamore logs were commonly called gums by local people, whether used for casing wells or set up and roofed over to serve as smokehouses or as shelters for pigs or chickens.

A story was told of a young husband and wife who had both been killed by “damp” encountered in one of the early wells dug in the area. When the man failed to appear at meal time, members of the family went to the well site and found him lying at the bottom of the excavation, about fifteen feet deep. Fighting off those who sought to restrain her, the wife ran down the ladder and at once fell over unconscious. Both were dead when rescuers, working frantically, finally got them to the surface.
Damp in wells was usually marsh gas, or methane, produced by the decomposition of vegetable matter in the glacial drift. Well-diggers were reported to have found tree trunks and limbs buried deep in soil never before disturbed by man. Such deposits were referred to as "Noah's brush-heaps" or "Noah's barnyards." They were found in what geologists call the older drift—the deeper glacial deposits.

To be sure of having safe water, most farmers in later years had wells drilled into the bedrock. A galvanized steel pipe about four inches in diameter was driven in, extending from the surface to a depth of ten feet or more into the underlying solid rock, to seal out all water except that coming from veins or crevices in the deeper rock strata. Contamination by surface water is therefore impossible so long as the casing pipe remains sound. Because the water in these wells is usually strongly impregnated with sulphur compounds, highly corrosive to steel, there is some question as to how long an effective seal will be maintained.

After the family was ensconced in the new dwelling, the old log house became a workshop, with carpenter's bench and an assortment of tools. It was used for storing everything that didn't seem to fit anywhere else and for all indoor work connected with butchering. In a corner of the big main room, I built for my own use a small photographic darkroom. The old box stove remained in place, providing heat when needed.

Built as it was, termites would have found it ideal for all their stealthy activities. Fortunately, up to that time none had appeared on our farm or elsewhere near. With
reasonable attention and care it could have been preserved indefinitely in sound condition. As time went on and the need for it diminished, however, maintenance was neglected. The original supporting pillars of oak gradually rotted away; then the lower logs began to decay. This caused uneven settling, throwing doors and windows out of plumb and allowing lower floors to sag and rot. At last, a useless eyesore, it was torn down. The logs of its walls, which had so long afforded protection against the elements and given friendly seclusion from the outside world, met the fate of logs from the old barn, being cut into firewood.