THOMAS C. HUBKA

MAINE'S CONNECTED FARM BUILDINGS*

Part II

ORGANIZATIONAL STRUCTURE

The picturesque visual variety of Maine's connected farms conceals a uniform arrangement of buildings. The prototypal organization for a fully connected house-to-barn structure consists of four distinct areas or general building types. A children's rhyme from the last century records the principal organizational components: "Big house, little house, back house, barn"[1] (Fig. 1). This organizational scheme became the dominant arrangement for farm buildings in northern New England in the late nineteenth century and continued to influence farm construction into the twentieth century when it was only gradually replaced by a farm building arrangement employing detached agricultural buildings.

Big House – Front, Main or Farmhouse

This building is the principal dwelling and symbol of home for the farm. It may be constructed in many house

*This is the second of a two part series. In the last issue an analysis was made of the reasons why the farmers of northern New England built connected farmsteads. This article will describe the individual buildings in the connected farm complex and trace the historical development of their architectural form.

Portions of this article have been revised and expanded from articles by the author in *Pioneer America* (December 1, 1977) and *Historical New Hampshire* (Fall 1977).

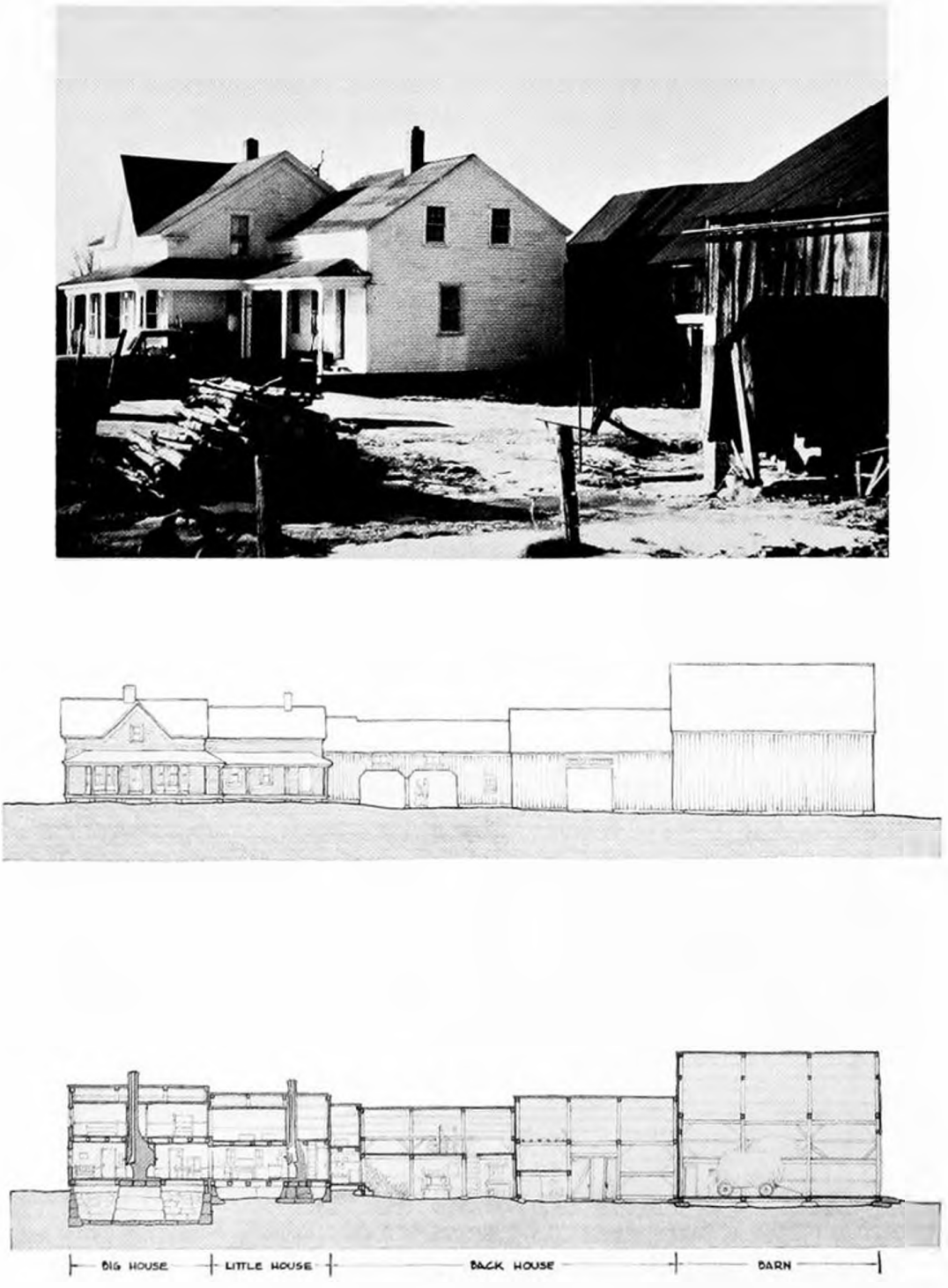

Fig. 1 Building organization for connected farmsteads. The section drawing depicts the organization, "Big house, little house, back house, barn." Woodsum-Hamari farm, Harrison, Maine, ca. 1890.

types and architectural styles. In the survey area, the statistically dominant "big house" was a symmetrical, center chimney, 1½ story Cape Cod type with two major front rooms and two or three back rooms[2] (Fig. 2A). A similar house plan with two stories (often called a Federal style house) was selected for more pretentious houses and is far less common. Each of these house types might once have been a separate house containing a kitchen in a front or rear room, but in almost all cases where this house forms a connected building arrangement the kitchen has been moved to the adjoining ell.

After the mid-1800s when the connected farm organization became popular, Maine farmers began to modify their traditional, symmetrical Cape Cod or Federal house plan, as well as several other less common plan arrangements, in favor of a house type with a doorway to one side of the gable end and a kitchen located in a connected building (Fig. 2B). This type was built in one and two story forms and is often referred to as a Greek Revival house. It is, however, not limited to this style or period, and was built in Maine from 1830 to 1920. Usually these buildings date from after 1860 and are constructed in balloon frame.

The symbolic importance of the "big house" is usually accentuated by the use of classical architectural detail in many local versions of the Federal or Greek Revival styles. Classical architectural detail may extend to all buildings including the barn, as is most often the case with pretentious farms and town houses, or, more commonly, it gradually diminishes toward the barns or may be confined to the major facade of the main house. The nineteenth-century revivals of architectural styles which repeatedly changed the fashions of elaborate houses in Maine towns generally had little effect on the majority of

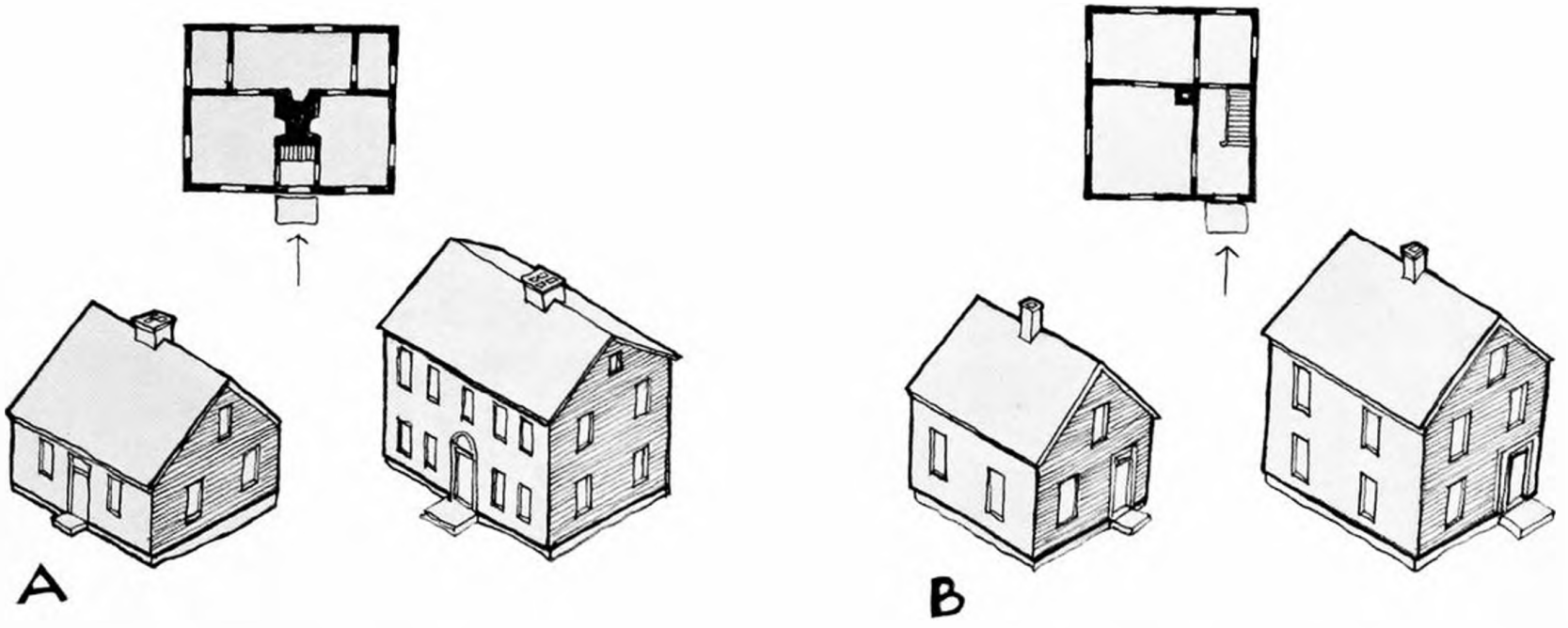

Fig. 2 Common "big house" forms in the connected arrangement: (A) 1½ story Cape code type house and 2 story Federal type house; (B) Greek Revival type house in 1½ and 2 story forms.

farm builders who continued to modify a simple version of classical details for their windows, doors, and cornice moldings.[3]

The "big house" continued the medieval English tradition of the formal parlor isolated from the main activities of the house. Today, as in the last century, the rooms of the main house are usually used for relaxation and sleeping while the principle activities occur in the kitchen ell area. Connected farm buildings thus reflect a common rural American life-style by emphasizing the kitchen as the major family living area of the house.

Little House – Ell, Kitchen, Shed, and Summer Kitchen[4]

There is a variety of building types for the "little house" in the connected building complex, but it almost always contains the kitchen area. Kitchen additions are pictured and recorded in the early settlement of Maine and Massachusetts, but the extent of this tradition is unknown. Kitchen buildings usually continue, in a simplified form, the architectural style of the principal house.

There are two patterns of pre-1840 kitchen buildings for Maine connected farmsteads: (1) those which were additions to earlier houses; and (2) those which were once original houses and were then added to larger houses. Both practices are common in the survey area of southwestern Maine. After ca. 1850 when the practice of making connected farmsteads was established, local builders constructed the main house and the kitchen ell at the same time. In most late nineteenth-century connected houses built in towns and villages, the kitchen ell and major house were articulated as separate forms even though they were built at the same time.

Two building types, now frequently kitchen ells, seem to have been a common original house form: (1) a simple one room, one story gable form, usually sixteen by eighteen feet to eighteen by twenty feet (Fig. 3A); and (2) a slightly

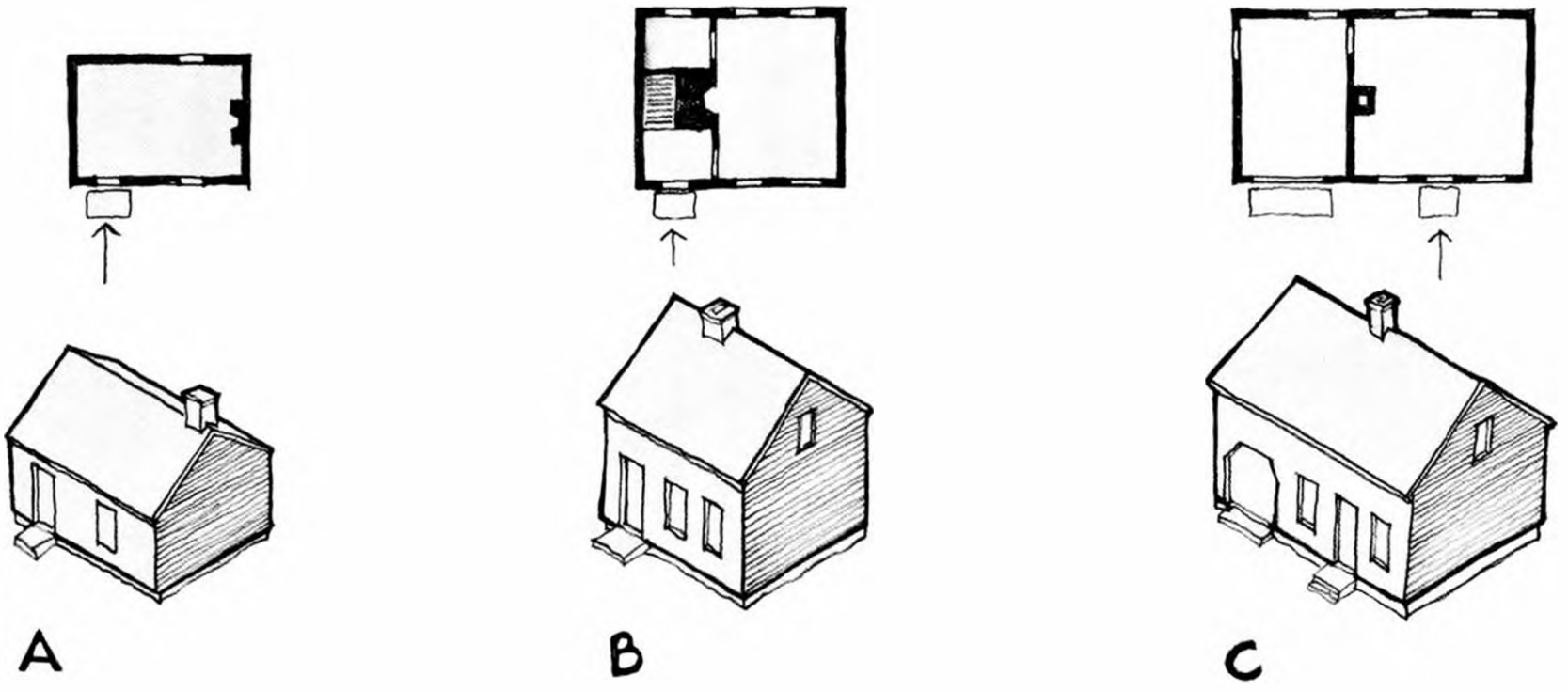

Fig. 3 Common "little house" forms or kitchen ells in the connected farm arrangement: (A) one room type; (B) 1¾ story, room and hall type; and (C) kitchen ell built for the connected farmstead plan after 1850.

larger one room, 1¾ story, major room with hall plan, usually eighteen by twenty feet to twenty by twenty-two feet (Fig. 3B). Both house forms have hewn gunstock corner posts with a major rafter and purlin roofing system similar to early barns. Along with the larger, two room deep Cape Cod type and the less common one room deep I type houses, these structures probably date to the earliest interior settlements in Maine. Kitchen buildings before 1850 should generally be seen as separate house types built before or after the major house.

Interestingly, ten original town charters granted by Massachusetts for the settlement of Maine specified a similar minimum dwelling size as a requirement for early homes – a stipulation made to insure permanent settlement. For example, the original grant to the town of Fryeburg, Maine, in 1762 specified a minimum size of "twenty feet by eighteen and seven foot stud,"[5] which is the size of many of the gunstock post, kitchen ells measured for this study and supports the hypothesis that many present kitchens were once original homes.

After 1850 kitchens began to be built in the bays of longer buildings which were intended to be additions to a main house (Fig. 3C). Unlike earlier kitchen structures these buildings were never conceived as separate structures but were designed to be linked to other buildings in the connected farm complex.

The kitchen area has always been the principal living space on connected farms. It is rare to find a kitchen ell without major additions and changes including porches (piazzas), window bays, dormers, and stove chimneys. "Raising the roof" or increasing the headroom in the second floor by raising the sidewalls and roof was a frequent change for both kitchen ell and main house.

Rooms adjacent to the kitchen usually provide support or storage areas for food processing activities, including the pantry or buttery and storage cellar.

Back House – Ell, Shed(s), Stable(s)

The "back house" is actually a general category for a wide assortment of domestic and agricultural buildings. One, two or even three separate buildings may connect the kitchen with the principal barn. The "back buildings" are frequently composed of structural members from several older buildings and may either be converted domestic structures (with studs and horizontal sheathing) or agricultural structures (with vertical sheathing). In a common pattern of growth, an older English barn was moved from a detached location into the building connected group and used as a stable beside a new, larger barn.

The structures connecting house and barn have served as auxiliary spaces for farm and domestic needs and reflect many of the changes in Maine agricultural products and methods in the nineteenth and twentieth centuries. The rooms or spaces closest to the kitchen have often been used as a woodshed, workshop, dairy room, loom room, farm laborer's quarters or a general kitchen and house storage area. The sheds or small barn closest to the major barn is frequently the stable, but also might be a vehicle shed, garage, small animal barn, barn workshop, or general barn storage area. The outhouse is almost always located on the north side of the backbuildings or ell nearest the barn, and is known affectionately to old timers as the "deacon's seat," and the "windy willie."

A striking characteristic of many connected farms is the juxtaposition of the stable and the principal barn. In the preconnected arrangement, the stable was often a separate building and when it was moved into the connected building group, it often maintained its separate form.

Many stables are converted English type barns which have been moved sideways into the connected building complex and now have an off-centered door in the gable end. This tradition was so strong that when new stables were constructed using balloon frame construction after 1860 they frequently maintained the earlier form and measurements of the old English barn.

Barn

The barn usually terminates the building complex and is the functional and symbolic heart of the farm complex. It is usually the largest element in the building group, and on farms settled before 1840, it is often the newest of several previous barns.

Barns on connected farms in Maine should be seen in two distinct chronological groups: (1) old English barns usually before ca. 1850 and less common today (Fig. 4); and (2) new English barns[6] usually after 1830 and now the most common barn form in northern New England (Fig. 5). The Old English barn (also called English, Yankee, or Connecticut barn) continues English building practices in the new world and is recognized by its distinctive side opening door in the middle of three usually equal bays. In plan it may be one, two, or three bays deep and a common measurement is approximately thirty feet wide by twenty feet deep. As a general rule the earliest English barns in Maine are quite small (eighteen by twenty-five feet), and later versions are of increasingly greater size.

Old English barns in Maine and northeastern New England continue a medieval English structural system that employs a major rafter, minor purlin roofing system, flared or gunstock posts and a complex girt-plate-rafter connection of very early English origin (Fig. 4). The old English type barns of Maine and the eastern section of northern New England differ from barns in the western

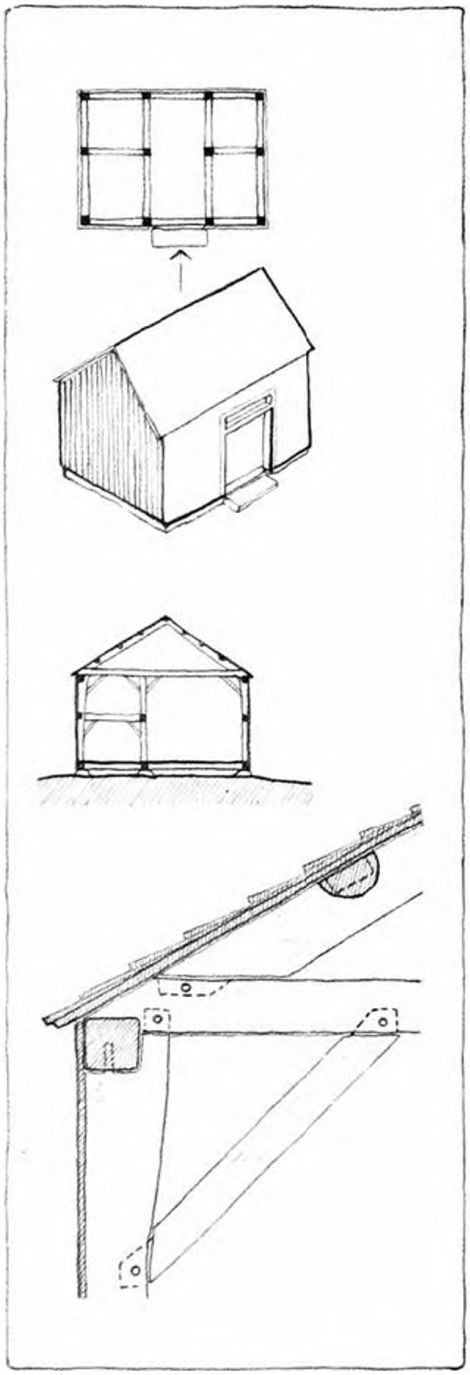

Fig. 4 Old English barn type with a side opening door. Illustrations show a typical plan, isometric section, and a detail of the rafter-plate connection.

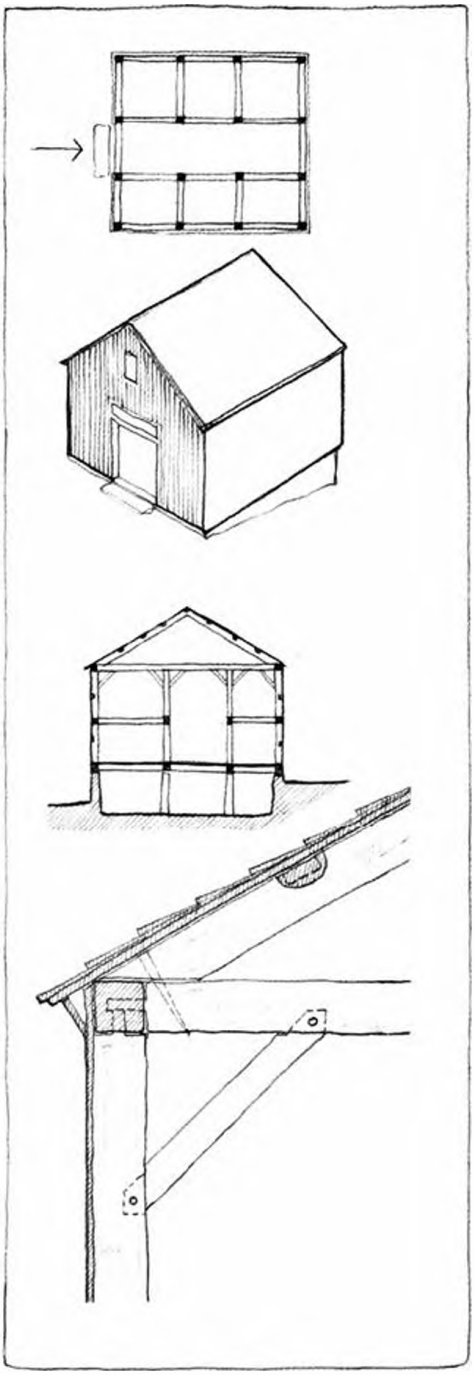

Fig. 5 New English barn type with a door in the gable end. Today the most common Maine barn.

section where the roof structural system is often composed of minor rafters with two major purlins and an elaborate ridge beam.[7] Both roof systems predate the eleventh century in England.[8] The presence of the old English barn in northern New England represents the remarkable survival of a medieval building tradition into the twentieth century. While it may seem like a fairly common barn form to some old timers, it is a rare example of a building system little changed in over one thousand years of continuous use.

The most common northern New England barn form today seems to have no indigenous name – it is "the barn" to its present owners (Fig. 5). The term "new English barn" (also known as the transverse crib barn in other areas of America)[9] is used in this article to emphasize the developmental relationship to the older English barn. The new English barn type has a major door centered in one or both gable ends. A vehicle drive runs the length of the barn parallel to the side walls. The bays on each side of the drive almost always vary in width with the larger hay-storage bay (twelve to sixteen feet) located on the colder northern side and the narrow cow bay (nine to twelve feet) located on the warmer southern side. The structural system of the new English barn type simplified the more elaborate wood joints of the old English barn system while maintaining its basic characteristics including a roofing system based upon the major rafter and minor purlin arrangement (Fig. 5).

Progressive farmers introduced the new barn organization in the early 1800s[10], but it only became commonly accepted after 1850. The change from the old English barn type to the new form marks a major change in northern New England barn building and is critical to the formulation of connected farmsteads. The idea of making the new barn type was accepted before the idea of connecting house and barn, although both ideas were

commonly implemented together after the middle of the nineteenth century. A transitional barn type was often employed by farmers who found the new arrangement desirable but, for various reasons, did not choose to build a new barn. Their solution was to modify the traditional side door, old English barn by moving the door to the gable end and either adding a side bay extension to produce three bays or realigning the central post system to form a central drive parallel to the ridge beam.

The new barn plan offered a distinct advantage over the old English barn because it could be expanded to the rear by the addition of new bays which were easily serviced by vehicles moving along a continuous central drive. This development was critical to the acceptance of the connected farm concept because it gave the New England farmer a means of accommodating the increased yields of late nineteenth century agricultural production in a larger barn without sacrificing the traditional smaller scaled order of the connected farmstead plan. In the survey area over half the barns were extended to the rear by the addition of one to six bays to increase animal shelter and crop storage capacity.

The earliest barns in southwestern Maine probably did not have cellars for manure storage. Barn cellars which are common today in southwestern Maine should be associated with the progressive agricultural changes introduced in the early nineteenth century, although, like other new building ideas, northern New Englanders did not generally choose to adopt them until the latter half of the nineteenth century.[11] Stone walled cellars were generally constructed for a new English type barn, although other common practices included digging a cellar for an existing barn or moving an older English barn to a new cellar foundation, often in a connected building arrangement.

A common late nineteenth and early twentieth-century barn addition was an expanded bay or shed to the south side of barns to accommodate the growing number of increasingly important dairy cattle. This was necessary because the narrow nine to twelve foot wide cattle tie-up in most barns could not effectively accommodate a large milking operation. Barn cupolas are almost always later nineteenth-century additions. Sliding doors gradually replaced hinged doors after the early 1800s. Exterior silos are twentieth-century additions, but small grain storage barns and interior silos which fill one barn bay were used before this time.

Additions and outbuildings related to the barn have always been common to Maine agriculture and generally reflect a specialized farming activity such as a sheep barn or a hen house. The old English practice of building separate barns for different farming activities was continued by English settlers of northern New England and was only slightly modified by the connected farmstead arrangement in the mid-nineteenth century. One traditional English barn building practice was the construction of a field barn at some distance from the house.[12] Old farmers can often remember the sites of one or two such barns now long gone. This practice seems to have been an alternative barn tradition that lingered into the twentieth century in some northern New England farming areas.

Detached outbuildings for activities not specifically related to the major agricultural production of the farm have always been common to the Maine farm. Some agricultural writers call this a sign of marginal farmers; Yankee farmers think of it as being resourceful. Buildings associated with fire, such as blacksmith shops, sap houses, hop houses, and model-T garages, have always been built away from the connected building complex. Other

detached buildings often included the icehouse, family store, sawmill, summerhouse (small gazebo), ash house, and vehicle sheds for farm and domestic uses.

Groups of Buildings

At first glance, many connected farms seem to be composed of an odd assortment of buildings, haphazardly thrown together and rambling in gross confusion over the Maine landscape. Most connected farms, however, share a highly structured organizational pattern which has remained remarkably stable throughout northern New England since about 1860. The striking visual variety of connected farmsteads is the result of a building tradition which allowed the individual farmer a high degree of building modification possibilities within a uniform pattern of overall farmstead layout. Conceptually and organizationally most connected farmsteads are similar, and, in spite of the wealth of individual variations and stylistic embellishments, the differences are largely only superficial.

In the prototypal arrangement for connected farmsteads, the house and barn are situated at opposite ends of a string of connected buildings which are aligned rectilinearly with the main road and form a flattened U or L-shaped arrangement around a south facing work yard (Fig. 6). In practice, of course, this organization took many individual forms, but the general pattern remains remarkably consistent throughout northern New England.

By the mid 1800s, most farm buildings were constructed in a rectilinear relationship with the main road. The buildings on most connected farmsteads were organized around a south-facing, all-purpose work yard (no indigenous name is known). All major entries for people and vehicles connect to this common yard which forms the focus for many farm activities.

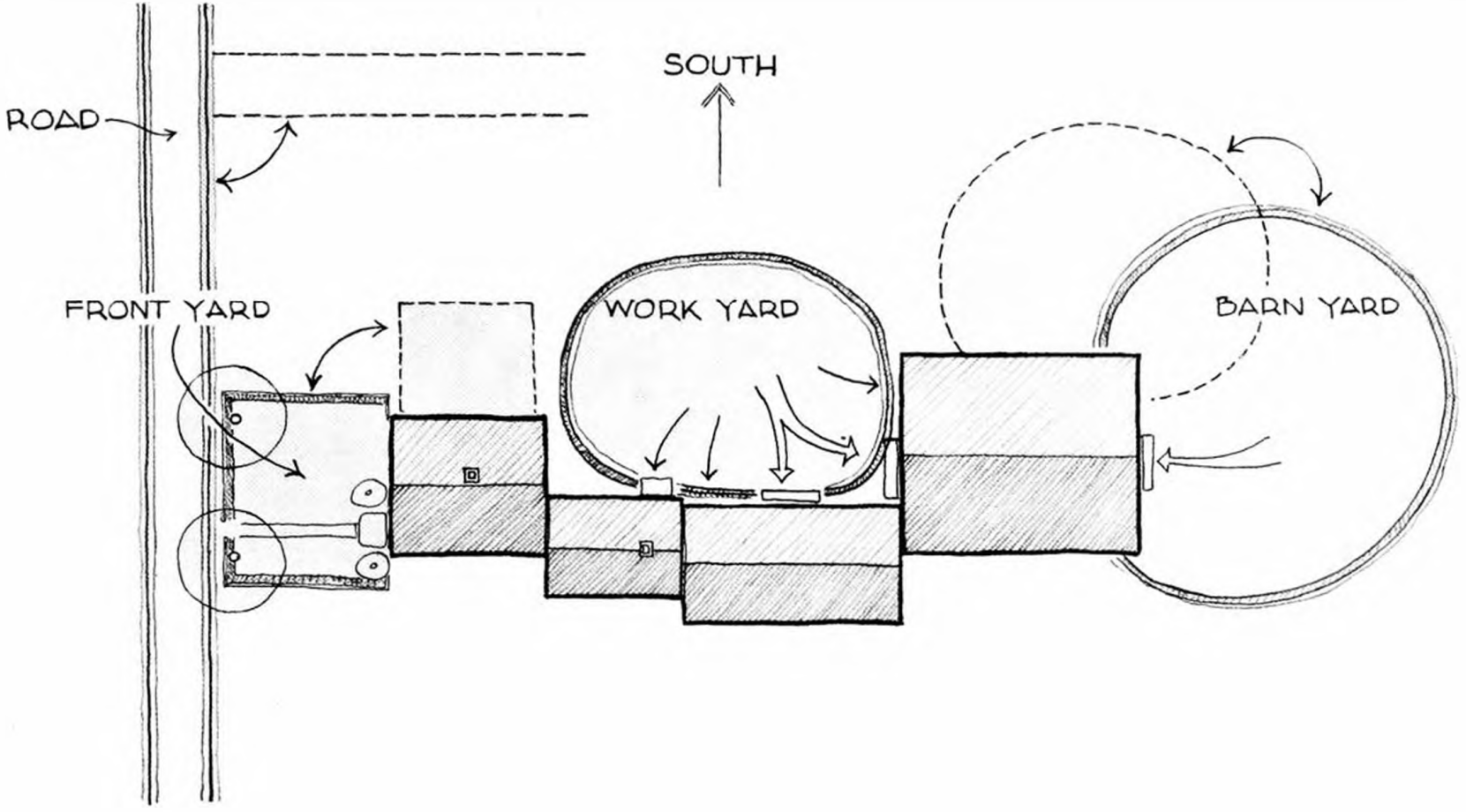

Fig. 6 Prototypal organization for farmyards and buildings on connected farmsteads. Drawing depicts the detached relationship of front, work, and barnyards. Dotted lines indicate alternative placements.

The exception to this organizational principle occurs at either end of the connected farmstead arrangement where the formal house entry on one end, and the barnyard on the other, form distinctly separate areas. The formal front entry to the main house is usually set off from the work yard activities and is seldom used except on formal occasions. The symbolic importance of the main entry is usually accentuated by classical molding of the main house facade and by a symmetrical composition of paths, shrubs, trees, fences, and gates which center about the front door and frequently define a formal front yard adjacent to the main road. Although the degree of formality often depended upon the wealth of the farm, even the most modest farmer created a formal front yard.

The animal or barnyard (no consistant name recorded) is almost always separated from the work yard activities for consideration of animal fencing, manure storage, and general sanitation. The animal yard almost always faces south or east, although its exact location in relation to the barn is subject to site conditions, barn construction type, and the nature of farming operation.

The typical arrangement of buildings in a flattened U or L-shaped form serves to protect the work yard and principal domestic rooms from northern winter winds. The stark, north side of most connected farmsteads has few windows, doors, or appendages and stands in striking contrast to the south side which is perforated with a variety of doors, windows, dormers and porches.

The practice of connecting house and barn is, of course, the most striking characteristic of connected farmsteads. This practice seems to deviate significantly from most American farming traditions where house and barn are held conceptually, and physically far apart.[13] This separation is reinforced by the absolute distinction between the work activities of males (barn) and females

(house) in the operation of most American farms. Actually, the attached arrangement does not deviate from the typical American pattern because the house and barn of a connected farmstead, while physically connected to convey visually an idea of unity and balance between house and barn, are held functionally quite distinct (Fig. 6). The "big house" symbolically continues the old English tradition of the parlor room separated from the everyday life of its inhabitants and was set aside for only the most formal occasions. The distinction between parlor and kitchen in early colonial houses is therefore continued in the connected farm arrangement by the functional separation of the main house and the kitchen ell.

At the other end of the building group, the barn engulfs most activities or channels them to the barnyard, thereby maintaining the traditional American separation between house and barn, or between people and animals. The connected farm building organization performs a delicate balancing act between the combination and separation of the opposite poles of house and barn. This organization successfully accomplished both tasks while providing its builders with a unified vision of a small family farm.

The joining of individual buildings on the connected farmstead might seem to defy any organizational principles, but the connections are less haphazard than they first appear. The characteristically staggered building plan abounds in agricultural areas where farms have been built continuously over a long period. A staggered building alignment is also a very old English tradition of adding to existing farm buildings. From a practical point of view a staggered building connection, designed to minimize the surface contact between two buildings, is a sensible way to join separately made or separately conceived buildings without disrupting the internal operation of either building. This is especially true for northern New England farms where the tradition of

preserving and moving existing structures was particularly strong. The jagged exterior appearance of many connected farms is more often the result of joining different types and styles of buildings and is jagged only from a modern or formalist perspective. The staggered room arrangement was, however, functionally and symbolically suited to the life-style of its farming inhabitants.

Buildings and Fields

The connected farm building organization which became popular after 1860 did not rearrange the existing field system on northern New England farms except to the extent that new mechanical methods and scientific practices were associated with the new building organization. In 1790 a farming dictionary published in America outlined a field division system which continued to be the basic pattern for a diversified crop, mixed husbandry, small-scale family farm in northern New England well into the twentieth century[14] (Fig. 7). This conceptual organization takes a wide variety of individual forms due to variations in topology, farm size and wealth, and crop production. Nevertheless, many of these patterns were common to the majority of connected farmsteads.

In the basic connected farmstead arrangement, house and barn are located close to the major road near the center of the property. Work and barnyards, and vegetable, herb, and flower gardens were located close to the house and barn. The basic field system extends outward from the house and barns with tillage lots or crop fields closest to the house, followed by mowing lots or hay fields, then by pasture lots, and finally by a timber or wood lot. The only major change in this early nineteenth-century arrangement was the movement of the barn from a detached position into alignment with the house.

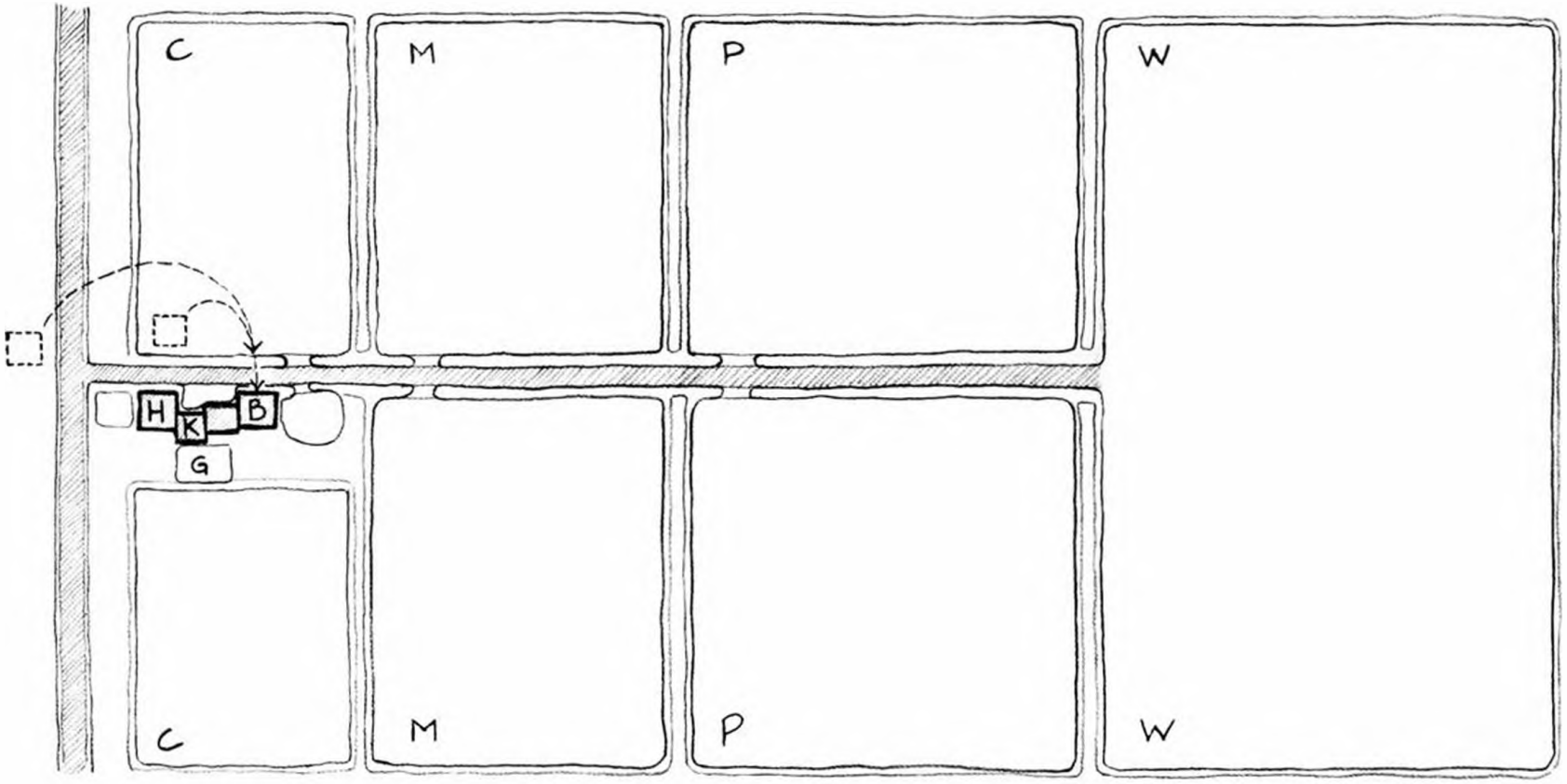

Fig. 7 Prototypal field organizations for connected farms. Key: (H) house; (B) barn; (K) kitchen; (G) garden; (C) crop fields; (M) mowing fields; (P) pastures; (W) woodlot. Dotted lines indicate typical movement of detached barns into connection with the house.

The entire field organization was usually connected by a lane or cow path which served to guide pasture animals (most frequently cows) from the barn to the appropriate field without disruption to crop or mowing fields. The stone walls that form the lanes surrounding the principal fields serve to keep grazing animals out of crop fields and to keep them in the pastures. The most common variable to this organizational structure seems to occur when house and barns are separated by the main road (a common preconnected farm arrangement). Actually the field organizational structure for these farms remains quite similar to farms where all land is located on the same side of the main road – the visual impact is, however, quite different.

It is difficult to generalize about individual farm site selection since topology, farm size and location, and crop production varied extensively in Maine. In one recurring early pattern of settlement for southwestern Maine, farmers selected the higher elevations of gently sloping hills for their initial settlement (or the higher elevations of their particular parcel of land). There were several factors influencing this choice, including the fact that higher elevations were less susceptible to sudden frosts in an area with an already short growing season. Higher elevations also tended to lessen water related hardships such as muddy roads and barnyards, late drying fields, and spring freshets. However, after surveying the fine view from the fields of many farmers, this writer must insist that the intangible rewards of a commanding view, and the deep association that this experience had with the clearing of the wilderness, was an equally important reason for the selection of sites on higher elevations.

HISTORICAL DEVELOPMENT

The historical development of the connected farm building group may be divided chronologically into four

general phases: a pioneer phase; a loosely connected or preconnected phase; a formally connected phase; and a refinement and development phase. While each phase involved significant physical and operational developments, only the change between preconnected and post-connected farms constitutes a fundamental reorganization of the traditional farming and social order of the northern New England farmer (Refer to Figs. 3 & 4 appearing in Part I of this article, *Maine Historical Society Quarterly* 18 (Winter 1978): 147, 148).

Pioneer Settlement

From approximately 1760 until 1810, early settlers of the Maine interior probably built two modest, separate structures, one for people and one for animals. No known record or existing building supports an early connection date for house and barn, and early records continually cite a single, detached house and barn as the earliest dwelling;[15] although it was probably not a log cabin as many old timers and town historians claim.[16]

The principal facade of early houses and barns shared a southern exposure. Early farmers did not find it necessary to align house and barn parallel to each other or parallel to the road but adjusted their buildings southward according to the immediate topological conditions of the site. Consequently, a common characteristic of an older farm building group is the offset or nonalignment of a south-facing house and barn, both to each other and to the principal road, although this is not a foolproof rule.

The pioneer phase was not an experimental settlement stage where new building traditions were tested in the wilderness. The overwhelming majority of settlers in the interior of southwestern Maine were people of English ancestry who came from previously settled farms largely in present-day Massachusetts, and also from New

Hampshire, and coastal Maine.[17] Their intent seems to have been the establishment, as quickly as resources would allow, of a farming operation and building arrangement similar to that in their former communities. Therefore, the pioneer phase should be seen as an interim period during which the settlers sought to replicate the pattern of their previous homes in Massachusetts, New Hampshire, and coastal Maine. Since no complete early settlements in southern Maine have persisted into our own time, it must be stressed that these ideas are largely conjectural. The farm building history of Massachusetts and New Hampshire farmers who settled Maine is even more obscure and needs additional research.

Preconnected Phase, 1760-1860

The typical farm organization in early nineteenth-century Maine (and, as far as can be determined, in eighteenth-century New England) consisted of two detached but closely situated groups of buildings, one for people and one for animals (Fig. 8). The house may have stood alone, but it was often joined to other domestic structures. An attached kitchen building, which is sometimes the original house, seems to have been a consistent appendage to many house types in early nineteenth-century paintings and accounts.[18]

The barns on early nineteenth-century farms formed a loosely organized, tightly clustered grouping. The English tradition of a separate agricultural building for each farm operation seems to have been the source for this tradition.[19] This practice was probably also established as soon as resources would allow in the early Massachusetts colony. Maine farmers continued this English building system by constructing a separate hay and cow barn, a stable, and an all-purpose vehicle shed frequently attached at a right angle to the major barn. Additional structures, such as granary or specialized animal barns, would have

Fig. 8 Preconnected farmsteads: (A) Whitney farm, Ingalls Hill, Bridgton, Maine; (B) Tenney farm, Quaker Ridge, Casco, Maine; (C) Gray farm, Ingalls Hill, Sweden, Maine; and (D) Nutting farm, Otisfield, Maine.

been common on larger farms. The Nutting farmstead in Otisfield, Maine, is an excellent example of a larger early nineteenth-century preconnected farmstead (Fig. 8D). The drawing shows a large, gable door, new English barn type which in ca. 1830 would have been one of the first barns of this type in southwestern Maine. Most of Mr. Nutting's neighbors would have continued to use the older side-opening English barn until after 1860.

Connected Farmsteads, 1840-1890

During this period the basic scheme of "Big house, little house, back house, barn," became the popular format for northern New England farms (Fig. 9). The connected farm organization continues most of the same building construction characteristics of preconnected farms while establishing the idea of connecting house and barn in a unified assembly. The making of connected farms should therefore be seen as a new building organization made of pieces from an existing farm building order of long tradition. Many connected farms of this period were joined by merely moving older buildings or by constructing new buildings between an existing house and barn.

Although some connected farmsteads have for their primary barn an older English barn type, most connected farm buildings were built to include the newer type of barn that has a door in the gable end and is called the new English barn in this article. The connected farm arrangement is also associated with new house forms that have a door in the gable-end and that employ balloon frame construction.

Connected Farmstead Refinement, 1860-1930

This is an arbitrary classification to emphasize the significant amount of elaboration and refinement which Maine farmers employed in the development of the basic

Fig. 9 Connected farmsteads: (A) Bagley farm, Ingalls Hill, Bridgton, Maine; (B) Sawyer farm, Ingalls Hill, Sweden, Maine; (C) Emerson farm, Ingalls Hill, Bridgton, Maine; and (D) Thomes farm, Maple Ridge, Harrison, Maine.

connected farm building system. The classically inspired Greek Revival house with an asymmetrical gable end door was a frequent selection of this period but is not as common as the traditional Cape Cod type house which survives in many altered forms.

The major change of this refinement period was the development of a continuously unified structure from house-to-barn (Figs. 9C, 9D). This refinement resulted in the construction of a kitchen within the bay or bays of a continuous house-to-barn structure instead of the linkage of several buildings. This was not a sudden development, but, generally speaking, the idea of a single continuous building uniting house and barn became common after 1870. Continuous ells are usually made of balloon frame construction, sometimes entirely new and sometimes engulfing previous buildings and sheds between house and barn.

A parallel development to the idea of a continuous, uniform building between house and barn was that of articulating and giving particular importance to the stable which was usually located next to the major barn. In the beginning phase of connected farm making, the stable was usually an existing structure attached to the main barn and therefore visually distinct. As the tradition developed in northern New England, some farmers continued to articulate the stable as a separate structure, often set back or staggered in the building arrangement, even though the entire ell might be built or rearranged at the same time. In a less common arrangement, the stable is located closer to the dwelling and may reflect the importance of the horse for non-farm or family use after 1860.

A significant number of structures based upon the connected farm building concept were built in Maine towns for an expanding class of artisans and factory workers. Although most of these people raised crops and kept animals for their own consumption, the major barn

was really used as a stable and is most typically constructed in a two-bay-wide, offset door arrangement common to most present farm stables.

The idea of joining house and barn was reinforced by gentlemen farmers and city dwellers in Maine towns who elaborated on the general framework for connected farm building. The period between 1870 and 1900 constitutes a golden era in the making of connected farms as a wide variety of architectural styles and building types were employed in the making of grand farmsteads and town houses. Most farmers, however, selected modest refinements to the traditional order of connected farms and added stove chimneys, two-over-two windows, porches, dormers, bay windows, summer houses, and countless interior room modifications. In most cases, stylistic changes were confined to the main house and kitchen, and did not affect the traditional order of the connected farm.

A final stage of connected farmstead development continues to the present on farmsteads which are no longer active farms. The agricultural buildings on these farms are often torn down or allowed to collapse. Conversions from agricultural to family use are frequently undertaken as many connected farms enter their second century of active use.

— NOTES —

References and data concerning connected farm buildings in northern New England are drawn primarily from the author's notes.

[1] This rhyme was told on two separate occasions by elderly men from Waterford and Harrison, Maine.

[2] The historical development of the Cape Cod type house is outlined in Ernest Allen Connally, "The Cape Cod House: An Introductory Study," *Journal of the Society of Architectural Historians* 19 (May 1960).

[3] Although waves of exotic revivals swept through the towns and villages of northern New England, the average farmer continued to employ a modified classical style until the 1900s. In the Ingalls Hill district near Bridgton, Maine, fifteen of eighteen existing pre-1900 houses are embellished with variations of similar classically inspired detail. The houses date from 1815 to 1900.

[4] Although local residents sometimes refer to their kitchen ells as summer kitchens, this does not seem to be an indigenous term to northern New England. The concept of summer kitchens was, perhaps, borrowed from southern literary examples in the early nineteenth century. Two active kitchens in the same house were rare in Maine farmhouses except where more than one family shared the same house. Today this is a confusing area because it was common practice to add a kitchen ell to a house with an existing kitchen. Usually, however, the older kitchen was converted to a parlor or dining room. Therefore, while the presence of two kitchens in connected farms is not uncommon, the practice of using two kitchens, or having a summer and a winter kitchen, is not typical of northern New England connected farms.

[5] *The Acts and Resolves, Public and Private, of the Province of the Massachusetts Bay* (1761-1764), v. 17, ch. 403, p. 174.

[6] The term "New English barn" was suggested to me by John A. Mott, Agriculture Associate, Old Sturbridge Village, based upon his analysis of barns throughout New England.

[7] From the author's data and a review of data provided by John A. Mott.

[8] C. F. Innocent, *The Development of English Building Construction* (Cambridge, England: Cambridge University Press, 1916), pp. 73-79.

[9] Allen G. Noble, "Barns as Elements of the Settlement Landscape of Rural Ohio," *Pioneer America* 9 (July 1, 1977): 73.

[10] For example, the major barn of the Nutting farm, Otisfield, Maine. Data from site investigation and interview with A. D. Nutting, present owner.

[11] "On the Construction of Barns, Stables, Etc.," *New England Farmer*, October 9, 1824.

[12] R. W. Brunskill, *Illustrated Handbook of Vernacular Architecture* (London: Faber and Faber, 1970), pp. 134, 151 (hereafter cited as Brunskill, *Illustrated Handbook*).

[13] John Fraser Hart, *The Look of the Land* (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1975), pp. 123-26.

[14] Samuel Deane, *The New England Farmer; or Georgical Dictionary* (Worcester, Massachusetts: Isaiah Thomas Company, 1790), pp. 69-70.

[15] Maine town and regional histories continually cite and picture small single detached houses as the original dwellings, as for example in *A History of Cumberland County, Maine* (Philadelphia: Everts and Peck, 1880), pp. 221, 327, 332. This pattern seems to be true for the entire New England area. See, for example, Anthony N. B. Garvan, *Architecture and Town Planning in Colonial Connecticut* (New Haven: Yale University Press, 1951), p. 112.

[16] In spite of the persistence of log cabin accounts in town histories, the early settlers of northern New England did not build log cabins, although early hewn log forts have been documented. For example, Richard M. Candee, "The Architecture of Maine's Settlement," in Deborah Thompson, ed., *Maine Forms of American Architecture* (Camden, Maine: Downeast Magazine, 1976), p. 27. Generally, log cabin accounts in Maine appear after the 1870s when the centennial celebrations reinforced the log cabin as a symbol of the American pioneering spirit. The accounts of crude wood and log structures which appear in many town histories are probably not inaccurate, but these structures were not akin to the developed tradition of log cabin structures brought to this country by German, Scandinavian, and Central European settlers, and popularized in the Midwest and South largely after 1800.

[17] Settlers in Harrison, Maine, until 1850, were almost entirely from Massachusetts or New Hampshire, and, judging from those on whom information can be located, of English ancestry. See Alphonso Moulton, ed., *Centennial History of Harrison, Maine* (Portland, Maine: Southworth Printing Co., 1909).

[18] For example, *Deneson Hill* (Southbridge, Massachusetts), a painting by Francis Alexander, ca. 1826, National Gallery, Garbish Collection, No. GAR 493.

[19] Brunskill, *Illustrated Handbook*, pp. 75, 136-53.