THE ARCHITECTURAL SIGNIFICANCE

OF THE

FIREPLACE

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OF THE
FIREPLACE

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CHAPTER I

INTRODUCTION

The problem of this study is to examine the earliest forms and architectural treatment of the open fireplace from the Prehistoric Age through the Renaissance period, and to determine its place in Modern American design.

In order to gain a perspective of the development of the fireplace, it is necessary to trace its growth from the dawn of civilization and to define its contribution to man in his progression from primitive humanity to his mastery of the techniques of modern culture.

Despite careful choice of words and minutely accurate descriptions, no text on the subject of the fireplace would be complete without reproductions of some of the most illustrious examples and typical selections included for the purpose of graphic illustration of the architectural change and development through the centuries. Therefore, it is the aspiration of these pages to sketch the story of the progress of the symbolic fireplace by means of the combination of narration and photographic image. No attempt has been made to cover so vast a subject completely, but its essence may be caught by a significant cross section of typical examples
quite as well as by exhaustive text and detail.

Some forty characteristic fireplaces, therefore, have contributed to this pictorial record of the hearth. Some of them bear historical importance; some are coupled with names in our history and literature; others are entirely obscure and unheralded. Some speak of grim struggle for existence; many reflect opulence and dignity. Each of them has a significant part in this pictorial pageant.

It is the sincere desire of the author that this work will provide for the high-school student of architecture a point of interest for further research and exemplify a contribution to their literature which will be enriched and emphasized with abundant studies particularly adapted for their use.

The photographs have been arranged in chronological order, as far as possible, so as to relate them as typical examples of the narrative and to portray the development which took place between the time of the Prehistoric Age and the opulent twentieth century.

The ever changing influence of European styles on our early American fireplaces is apparent in this chronology of pictures. More intangible, but most significant of all, is the gradual development of American character and tradition which took place before this intimate background. It is the
very life of a young and courageous nation which is reflected in this graphic narrative.

Man is scarcely man until he is in possession of fire. Although there exists no authentic knowledge as to the original use of fire or as to man's discovery of the art of kindling a flame, primitive legends, the usage of fire by primitive people, and ancient religious ceremonials give some clue to the major facts. Man soon realized the value of a blaze not only for warmth but for cooking food, warding off wild animals, and driving game out of the jungles. Prometheus decided the easiest way to make man superior to all other animals would be to make him a present of fire. The first germ of civilization was sown only after it was discovered that fire was something to use.

The vicissitudes and constant danger of living in the days of early man made existence a constant struggle. Family life as we know it today was more of a huddle for warmth and protection than a social gathering; that began when man adapted fire for his use. The community fire became the first glimmer of a state. It established a permanent home with some kind or organized family life. There is no way of

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2 Ernest Greenwood, Prometheus, New York, 1929, p. 15.
knowing how many centuries elapsed before man became dis-
satisfied with his open bonfire, began to master it, even-
tually enclosed it, and centuries later added a crude
chimney.

No part of the interior of a building offers so broad
a field for the exercise of the taste and skill of the
designer as the open fireplace and chimney piece. The
friendly warmth of the fire renders it the immediate center
of attraction. Its ever-varying, cheerful flame enchains
our attention as a living and sympathetic companion, long
after the surrounding inanimate objects have ceased to
occupy our thoughts. Hence the chimney piece has for cen-
turies been honored and treated as the focus of interest,
the keynote of the interior decoration of the house. No one
object has assumed a greater and more interesting variety of
forms at different hands, and none shows to better advantage
the peculiar character and individuality of the designer.

Through careful exploration of all literature that could
be assembled relevant to the open fireplace and by thoughtful
examination of every design that could be obtained, there is
compiled an index of the comparative architectural treatment
of the fireplace, both mediaeval and modern, at home and abroad.
CHAPTER II
EARLIEST FORMS OF THE OPEN FIREPLACE

Every people known to history have had their fireplace traditions. Indeed, the discovery of means of igniting and using fire marked one of the long steps forward by which primitive humanity found its way to civilized existence. The Greek and Roman classics are dotted with allusions to heating and cooking appliances. But it is not in the land of classic tradition that we look for the historic source of the fireplace as we know it, since the Mediterranean countries have too sunny a climate to place maximum reliance on artificial warmth. Our fireplace traditions were nurtured in the long winters of northern Europe. In general, northern Europe reflects in all its arts the lower temperature, and southern Europe the conditions which obtain in warmer climates and are similar to those of the Near East.

The first application of artificial heat consisted most likely in igniting dried sticks and leaves in a grove, a cave, or other natural shelter. In the frigid zones where wood and coal could not be obtained, a brazier was used in the form of a smoky lamp of the Laplander and the Eskimo. Here economy approaches its maximum, the heating, lighting, and ventilation
being effected by one and the same agent, namely, putrid oil, burned under a hole in the roof of the hut. "The Greenlander!" says Tomlinson, "builds a larger hut and contrives it better, but is often occupied by half-a-dozen families, each having a lamp for warmth and cooking, and the effect of the arrangement, according to the remark of a traveler, 'is to create such a smell that it strikes one not accustomed to it to the very heart.'

One of the two quaint pictures from the Scandinavian Museum at Lillenhammer, Norway, affords a good idea of the central hearth as it existed in nations until the fourteenth century or later. A little farther south, it has been said, the lace makers of Normandy warmed by the natural fires burning in animals. In Switzerland and in upper Italy evidences have been found of numerous lake dwellings, and in Ireland and Scotland analogous dwellings on islands, in lakes, and in morasses have been found to which the name of **crannoges** has been given. Every hut was provided with its hearth, which consisted of three or four flat stones.

A record of the visit of William de Rubruquis, on his trip to see Grand Kahn of Mangou, Northern Tertiary, in 1254, reflects that in the center of the tents of the Grand Kahn there was an open stove in which a fire of thorns and other

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1 John Pickering Putnam, *The Open Fireplace in All Ages*, Boston, 1892, p. 17.
dried sticks was burning.

An interesting example of primitiveness is seen in the fireplace of the Mongols of Lob Nor. The description of one written in the latter part of the nineteenth century describes it as a hut with an earthen floor which was covered in places with old bits of felt; in the center there was a cavity surrounded with flat stones which served as a fireplace. Here, as in other villages, the inhabitants were seated in a circle around the hearth, upon which burned a fire made of bundles of dried reeds. The little girl of the family lighted the ends of the sticks first, and as the flames gradually consumed the stalks, she pushed the bundle farther in as it burned. The flame was very vivid and furnished a better light than a lamp. The families of the village were well pleased with this means of heat and light.

In Persia the fireplace was put in the middle of the room and consisted of a deep, round hole in the floor, in which charcoal and cow dung were burned.

Excavations at Pompeii and Herculaneum show that Roman houses differed but little in plan and disposition from the Greek dwellings which preceded them. No fireplaces or chimneys have been found, but braziers were probably used in Italy. Although many of the Greek and Cretan dwellings were built of wood and sun-dried, unbaked brick, the same form was sometimes built of stone. In the round stone huts, the
PLATE 3 - MEDIEVAL NORSE DWELLING
covering was contrived by setting each row of stones a little inward from the row below, so that little by little a conical shape developed until the hole at the top was so small that it could either be capped by a single stone or else left open to carry off the smoke from the hearth fire within.

This is known to be characteristic of a band which ran through the Mediterranean Islands, across Spain and Portugal, and up the Atlantic coast to the British Isles. Skara Brae, in the Orkneys, excavated a few years ago, dates to Pictish times, near the beginning of the Christian era. Descriptions of the houses picture the floor as being paved with flat stones, and a hearth, occupying the approximate center, surrounded by a raised border to keep the ashes from spreading.

The presence or absence of fireplaces and chimneys is no test of date. Colchester is certainly an early keep, but it is well provided with fireplaces which appear to be original. These fireplaces have not proper chimneys, but only holes in the wall a little above the fireplace. This rudimentary form of chimney is found as late as Henry II's keep at Oxford, and there is said to be documentary mention of a proper chimney as early as 816 in the monastery of St. Gall.

The entire absence of the fireplace is no proof of early

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PLATE 4 - BEEHIVE TYPE HOUSE - SMOKE FLUE
date, for in Henry II's keep at Peak in Derbyshire, the walls of which are almost perfect, there are no fireplaces at all, nor are there any in the thirteenth century keep at Pembroke. It is possible that in these cases a free-standing fireplace in the middle of the room, with a chimney carried up to the roof, was used.

The Western Hemisphere affords a good opportunity to show the position of the fireplace over an immense "ladder" of latitudes. Beginning with Alaska, the lamp, which corresponds with the house fire, was kept within the dwelling. In southern Alaska among the Indian tribes, the fire was placed on the floor in the wooden houses, sometimes a box filled with earth being the receptacle. The Makah Indians of Washington put the fire on the floor in front of the bunks. The Patwin of the Sacramento Valley, California, placed the fire in the middle of the hut and provided a smoke hole. The Tulolome (Athapascan) on Rogue River, Oregon, lived in square pits boarded up. The fireplace was on one side, and the smoke escaped through a draught passage. The Carrier (Athapascan stock) had a central house fire, a smoke hole, and a ladder for exit and entrance, but no cowl as among the Haida. Stones were used for andirons. Communal houses had as many fires as families.

The Plains Indians placed the fire in the middle of the
the *tipi* or lodge. In northeast Canada the Montagnais also placed the fire in the *tipi*. This may be considered the northern method of fire placement in general, and it shows temperature and other environmental influences. In the southwestern United States, the Ute and the Navaho open-air tribes placed the fire in a box of stone slabs. The Pueblos anciently kept the fire in a stone box in the middle of the room. Later the fireplace was placed in the corner, covered with a hood and fitted with a chimney made up of pottery vessels with the bottoms knocked out. The ancient subterranean or pit houses uncovered at Luna, New Mexico, had the fireplace near the center of the circular pit, off center, it is thought, on account of the ladder by which exit and entrance were effected through a combination door and smoke hole. The Pima fireplace was placed under the ramada or branch bower in front of the hut. It was sometimes protected from the wind by a wing wall of mud extending about two-thirds of the way around the fire, and a wooden rack was placed over the fire, on which were set cooking vessels. In the fires in the windbreak houses of the Pima, three stones were placed in the fire for similar purposes.

In Mexico, generally the fire was placed outside the door of the house. In Columbia, at Panouite, in the mud huts, the fire was placed in the middle of the room between three stones.
like structure of their houses. The larger communal structures of northern South America, which consisted generally of a roof on posts, had a house fire in the center, or near the hammocks of their occupants. In the communal house at the junction of the Uapes and Rio Negro, Brazil, there was a fireplace to each family. To the south on this vast continent, at Chaco, Patagonia, the outside fire was common. In their most inhospitable region, the Fuegians made little use of house fires, but the Yaghan tribe built conical wigwams with a hearth in the center.

The Soloman Islands depict a somewhat different fire picture, however, for the wood used for the flooring of the dwellings was the hardest obtainable and seemed to be of a material which took no heed of wear and tear. One log, tougher than the rest, was placed in position by the door, and on this a fire was laid. Beside it a woman squatted to cook her lord and master's evening meal.

Among the Malays, Selangor, Malay Peninsula, the most prevalent type of hearth was the Malay box-hearth, which consisted of a shallow box filled with earth, upon which were usually laid, in a triangle, the Malayan fire stones, between which a fire was kindled. Fire logs, such as were used by the inland Sakai, however, were often found.

In many places observers have noted the smaller arrangements in primitive fireplaces. There are records of the
PLATE 5 - ANCIENT PIT HOUSE FIREPLACE
fireplace as a shallow basin or pocket in the earth, more or less worn down by raking out the ashes and by fire action. Such a fire hole assumed the appearance of a circular shallow place for the fire, probably so arranged for convenience and safety. The placing of the fuel, doubtless, had much to do with the contour of the fireplace.

It is thought that the next step of progress came in the form of an invention to raise the fuel above the fire bed and promote combustion. This was achieved through the placement of stones in the fire, on which the fuel rested.

Records attest that almost all of the primitive fireplaces had, as an early addition perhaps, a bordering circle of stones, which facilitated the keeping of the fire and protected it, in a measure, from winds. The situation of the fire must have varied. The extemporaneous fireplace can hardly be imagined since the very possession of fire entailed responsibilities as to care and preservation which predetermined a well-considered plan to keep the fire. The pre-architectural period thus required the placing of the fire in an agreed location for convenience and other requirements of the social unit, considering not only the benefits but the dangers of the fire.

At a later stage there appear records of three stones or bosses of mud placed in the fire as a rest for the cooking pot. Trivet bosses of baked clay in one piece, forming a
fireplace, have been uncovered in ruins of both the cliff and open-air types in New Mexico and Arizona. The boxing in of the fire with circles of stones, slabs, mud, or daub, and the use of wattle walls were steps toward a better utilization of fire and a hint at coming inventions. In the ancient pit houses at Luna, New Mexico, there has been uncovered a hearth in the side of a pit. The bottom was a smooth stone slab, and the jambs were slabs of clay, baked hard by the fire. The stone bottom projected in front, forming a little step. The central fire in these pits was laid sometimes on a pavement of stones.

The New England Indians constructed their wigwams by setting up one good post in the middle that reached to the hole in the top, with a staff across it. At a convenient height they drove a pin, upon which they hung their kettle. Beneath they set up a broad stone for a back, which prevented the post from burning.

The chimney might have had its origin in the embankment, walling in, or other protection for the fire from the wind. The idea of draught had not then appeared. Sooner or later a simple knowledge of draught was gained, and perhaps the direction of smoke was the first object sought. It has been

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observed, however, that some natives appeared to be apathetic toward smoke, and primitive-appearing house fires among many tribes had little provision for carrying smoke away. In a sense the little aboriginal house may be conceived as a protection to the fire and the structure itself a chimney. In pre-Columbian times, there were no chimneys in the Western Hemisphere. The chimney was early introduced in America, principally from Spanish sources. There is a chimney of brick in Gloucester County, Virginia, which is reputed to have been Powhatan's; in any case, it belongs to early colonial times. The Pueblo Indians, being practical house builders and willing to make improvements, adopted the chimney many years ago. In post-discovery America the use of the chimney was sporadic. The great mass of the population retained the time-honored open fire.

Fire has had an important influence in architecture. The primitive house was circular and conical, and was built to contain one family. This type had the fireplace in the center, and the apex of the roof was left open to carry away the smoke. It was distributed widely in the world among the less-advanced peoples. Ancient references, inscriptions, and other data show the beehive-shaped house as probably the earliest form having definite architecture, which was a

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notable advance over the simple windbreaks and lean-tos. The primitive circular house and its fire had to be in conformity, and the house was built around the fire for several reasons. First, the house was built of inflammable material, and thus the fire could not be safely laid to one side. Second, the fire in the center allowed the greatest area of floor space at an equal distance from the heat and light. Furthermore, the fire and smoke exit had to coincide, and one of the earliest observations was that smoke goes upward and into the conical roof, which in this sense was a forerunner of a knowledge of draft, this conical roof exteriorly being the form to shed water. The house has been spoken of as "clothing for the family." It has also been suggested that its earliest purpose was the housing of fire.

The communal house came later and evidently was the coalescence of several family units under a more highly developed social order. Here the family had its own fire. The style of architecture was changed to oblong, but the interior partitioning for the family became rectangular. A suggestion of the coalescence to form the long, communal house is seen in James Teit's description of the houses built by the Thompson River Indians on the occasion of a feast. 5

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Plate 7 - Chimney of Logs
These Indians built round ledges with fire in the center and a smoke hole above. For the festival they built two lean-tos, with fronts facing, and made fires along the alley between. They covered the alley with brush and poles thrown over the two sections, forming an immense lodge. Another suggestion was the grouping of five huts among the Fuegians, with fire in the center of the group.

The theory offered, therefore, is that the relationship of the fire to the house in the open country, away from caves and natural shelters, may be fire in front of a windbreak; in the middle of a circular break; in the middle of the conical house, supposed to be an archaic form; in the compartments of the communal house; in square or oblong rectangular houses, generally in the center, and with the development of architecture, at the side or end of the room.

At first the fire in the house was not for any special purpose but was of general utility. The divarication of the fire had not been carried on to any important degree. The prime ideas of warmth, light, and heat for cooking covered most of the employments of fire, however, and were concentrated in one fireplace. The great advancements which grew out of the simple fireplace are characterized by the multiplicity of

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devices through which portions of fire are made to do special work. These devices are innumerable and are indices of the stages of progress through which man has passed. They mark a very substantial progress, on the whole without retrogression, slow in the earlier stages, but in the later stages rushing to an enormous development not to be catalogued or comprehended.

If warming the habitation was incidental in the early uses of the fireplace, it was that such need was not apparent. It is presumed that man was inured to stresses of lower temperature, which even in tropical latitudes seemed grievous at times. Warming was established from the first as one of the important ideas to be developed in overcoming environmental conditions.
CHAPTER III

THE FIREPLACE IN THE MIDDLE AGES

The idea of building the fireplace against the wall probably originated in England in the eleventh century, at the time of the Norman Conquest. Previously, the chimney consisted merely of a hole in the roof, with a small wooden tower to carry up the smoke. The actual progenitor of our brick or stone house is a little difficult to find. The Roman houses at Silvester, built of brick and with central heating, were too advanced for the rude Saxon invaders, who were content with more primitive abodes. At the time of the conquest, fortresses were constructed and the roofs used for defence, so that the central opening for smoke was rendered impossible. The fireplace was removed to an outside wall, and an opening made in the wall for the passage of the smoke. Soon after the conquest the oblique opening in the wall gave place to the ordinary chimney-flue. The fireplace and flue in the great guard room of Conisborough Castle, erected in or near the Anglo-Saxon period, in its primitive form consisted of a simple niche cut into the thickness of the wall, the

1John Pickering Putnam, The Open Fireplace in All Ages, Boston, 1882, p. 18.
sides terminating in small piers supporting the massive hood. The oldest fireplaces of the Middle Ages were often circular in plan, the back of the fireplace forming one segment of the circle and the mantel and hood the other. Those believed to be of the twelfth century were not so large as those of a century later, and the mantel was likely to be formed of a single piece or two pieces of material, as in that of the Cathedral of Puy en Velay and in that of a private house in the old town of Cluny, France. Here the hood was supported by a single curved timber. In this example the entire thickness of the wall was used, the back of the fireplace being on a line with the outside of the wall, so that the masonry of the chimney shows in the projection on the exterior. The hood is elliptical and resolves itself as it ascends into a circular flue. On the right and left are little shelves for lamps, corresponding to nineteenth-century gas burners on the chimney breast. The low windows near the fireplace enabled the occupants to see what was going on in the street while they sat by the fire.

The old fireplace in Roslin Castle is illustrative of colossal dimensions and extreme simplicity of design. In these great fireplaces huge trunks of trees, six or eight feet long, were sometimes burned. Seats were placed on and about the hearth, and the screens and jambs of the
fireplace formed together a complete antechamber, as it were, apart from the large halls in which they were built, and here the family united to pass the long winter evenings and listen to the famous legends of olden times.

After the thirteenth century, the kitchen formed part of the main house and was no longer a separate establishment. Here whole sheep and oxen were cooked at one time in the massive fireplaces. A beautiful example, found in the establishment of the Abbey Blanche de Mortain, was built of granite and still bears the arms of the Abbey and the triple pothanger with the iron plate behind the fuel. Here there are no piers at all; the hood rests on heavy corbels of granite, and the fireplace is built, as usual, in the thickness of the wall. Up to the fourteenth century the fireplaces of private houses and chateaux were generally of extreme simplicity; it was only later that any attempt at decoration was made.

During the thirteenth century, castles were enlarged by additional buildings which clustered around the Norman keep. The first important English buildings of brick and stone in feudal times were the castles and the keeps. They were not mere forts but uncomfortable dwellings, their

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PLATE 9-KITCHEN FIREPLACE OF GRANITE
comfort being sacrificed to safety. When the hearth was removed from the center of the room, a kind of chimney was arranged slantingly in the thickness of the wall. Because of the increase in hospitality, these inconvenient four-storied keeps, necessary in turbulent times, were frequently abandoned as residences in favor of a hall with large hooded wall fireplace and additional living rooms conveniently placed in the inner court, as at Stokesay Castle, Shropshire, which is a complete specimen of an Early English castle with gatehouse.

Domestic architecture in England owed little to the Roman occupation, as the uncovered atriums of the villas were unsuitable for the English climate. A distinct type of dwelling house was evolved, in which the central feature was the covered hall or house-place. Throughout the Mediaeval period it served many uses, and in Saxon times it frequently formed the one and only room for sleeping, eating, living, and cooking for the owner, his family, guests, and serfs. Light came through windows with shutters, and the only heating was supplied by the log fire on the central hearth, the smoke from which found its way out through an opening in the roof.

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PLATE 10 - Stokesay Castle
When in the Middle Ages, the hearth in the center of the room was replaced by the wall-chimney, the fireplace was invariably constructed with a projecting hood of brick or stone, generally semicircular in shape, designed to carry off the smoke, which in earlier times had escaped through a hole in the roof. The opening of the fireplace, at first of moderate dimensions, was gradually enlarged to an enormous size, from the erroneous idea that the larger the fire, the greater would be the warmth of the room. By degrees it was discovered that the effect of the volume of heat projected into the room was counteracted by the strong draught and by the mass of cold air admitted through the huge chimney; to obviate this difficulty, iron doors were placed in the opening and kept closed when the fire was not burning. This was only a partial remedy, and in time it was found expedient to reduce the size of both chimney and fireplace.

The hearth in the middle of the hall still existed in the fourteenth century as a general custom. The great logs were simply piled on andirons, and the smoke escaped through the louvre on the roof. Major J. S. Champion, an English traveller, gives the following description of a Spanish kitchen fireplace, showing that this rude form existed as late as the eighteenth century:

Almost in the middle of the room was a rough hearth, about four feet square and a foot high, and composed
PLATE II - ENGLISH MEDIEVAL FIREPLACE
of tiles, flat stones, pieces of iron—anything that
could not consume. In its center burned a fire of
three sticks, laid star-fashion, with a blazing
brushwood heaped on them. A large wooden hood, sup-
ported by massive rafters, caught and conducted such
a portion of the smoke as did not circulate about the
room to a hole in the roof furnished with a rough
louvre, through which it escaped; and from a cross
iron of the hood hung a stout chain terminating in
a hook, by which was suspended a large pot-full of
potatoes slowly simmering. 4

Wood was the ordinary fuel until the seventeenth cen-
tury, and this was burned on the capacious hearth, resting
on two standards or andirons, a name which may have come
from the Anglo-Saxon brandisen, or brand-iron, or from the
word hand or end iron. For the large kitchen fire, the
standards were strong and massive, but quite plain.

Throughout the length and breadth of Italy, scarcely
a trace of civic buildings, which must have served the
various needs of even the rudest of governments, can be
found dating back farther than the twelfth century. 5 The
remains of the houses which the nobles built in the cities
are less than those of their towers. Constant devastation
by war, and especially by fire, easily accounts for their
disappearance. The construction of the great mass of houses

4 John Pickering Putnam, The Open Fireplace in All Ages,
Boston, 1882, p. 21.

5 Charles A. Cummings, A History of Architecture in Italy,
invited calamity. The private houses of the people were of wood, slightly built, small and low roofed with wood or thatch, and without chimneys but with an open hearth on which fires were kept for warmth and cooking. Toward the close of the twelfth century, Piacenza and Ferrara and doubtless other cities, made a law prohibiting the use of wood or straw for roof covering. In Milan a law was passed prohibiting the lighting of hearth fires when the wind was blowing. It is said that as late as 1368 there were no chimneys in Rome.

In addition to the pictorial records of the ancients and the less satisfactory cursory remarks of their authors, the study of architectural vestiges occasionally affords useful information. Winklemann, in describing his discoveries at Herculaneum, says:

Of chimneys in apartments no traces are to be seen. Charcoal was found in some of the rooms in the city of Herculaneum, from which we may conclude that the inhabitants used only charcoal fires for warming themselves. . . . In the villas, however, which were situated without Rome, on eminences where the air was purer and colder than in the city, the ancients had hypocausts, which were perhaps more common than in the city. Stoves were found in the apartments of the ruined villa when the ground was dug up. . . . Below these apartments there were subterranean chambers, about the height of a table, two and two under each apartment, and close on all sides. The flat top of these chambers consisted of large tiles, and was supported by two pillars, which as well as the tiles, were joined together, not with lime but some kind of cement, that they might not be separated by the heat.
In the roofs of these chambers there were square pipes made of clay, which hung halfway down into each, and the mouths of them were conveyed into the apartment above. Pipes of the like kind built into the walls of the lower apartment rose into another in the second story, where their mouths were ornamented with the figure of a lion's head in burned clay. A narrow passage, of about two feet in breadth, conducted to the subterranean chambers, into which coals were thrown through a square hole, and the heat was conveyed from them by means of the before-mentioned pipes into the apartment immediately above, the floor of which was composed of coarse mosaic work, and the walls were encrusted with marble. This was the sweating apartment. The heat of this apartment was conveyed into that on the second story by the clay pipes enclosed in the wall, which had mouths opening into the former, as well as the latter, to collect and afford a passage to the heat, which was moderated to the upper apartment, and could be increased or lessened at pleasure.

The hypocausta in private buildings, however, was the exception, not the rule. Apart from the brasiers, the most general way of warming apartments by the ancients was by means of the fire of wood or charcoal built up on a hearth, a flat stone or concave depression placed in the center of the rooms, the smoke from which was conveyed away through an opening in the roof, or simply by way of the doors and windows. Sometimes such hearths were placed close to walls. When the Roman villa was discovered at Bignor in Sussex, a hearth of this kind was found. It was formed of a stone slab and some bricks, firmly clamped together by means of iron ties in

PLATE 13 - WOODEN HOOD
such a way as to provide a well-like enclosure. In this instance there were no signs of any chimney connection, and there were no traces of any superstructure. The Roman invaders used the brazier and the open chimneyless hearth, so that it is evident that they cannot have found any superior device of native contrivance.

Rather than the idea of conservation of heat, a desire to provide safeguards against conflagration was the guiding principle responsible for the evolution of the semi-enclosed fireplace and chimney. Field practice taught the advantages of building up a fire within the confines of a back wall and two side wings, rather than on a mere slab; so the central position of the hearth was changed for that of a space against a chamber wall, often with disastrous results. This experience led to a lining of the wall at the back, especially when much wood, or merely reeds and mud, were used in construction. The training up of the side wing enclosures would allow the provision of a back plate. The benefits to be derived from a side opening in the outer wall and some means of directing the smoke toward it, sooner or later became evident, and thus the fireplace and chimney came into existence. All this is evidenced in the early examples of the Romanesque buildings.

In the Romanesque we have a sterner rendering of that
Plate 14 - Fireplace at San Germano - Italy
phase of Roman architecture adopted for military and semi-military edifices. In the halls usually the flat, chimney-less hearthstone, placed in the center, prevailed. At Penhurst Place, Kent, the Banqueting Hall has a central fireplace, a mere platform of stones with an octagonal kerb. However, a considerable step forward was made by the later Romanesque builders with the appearance of regularly-defined fireplaces with rudimentary chimneys. Of the many examples of this notable advance, Conisborough possesses peculiar interest, both to the archeologist and the architect, in this particular connection, because two of the keep's chambers contain fireplaces which are characterized by very instructive transition features; that is to say, the hearths are of a primitive type, but are provided with astonishingly well-developed frames and hoods, as well as with quite effective chimneys. This keep, which was built for William de Warren under license from William Rufus and therefore dates back to the last decade of the eleventh or the early years of the twelfth century, is a tower rising from the spreading base; it has immensely thick walls and only one chamber on each floor. On the first floor is the principal chamber, and here is a large fireplace, the hearth against the wall, but not recessed, coming well into the room. In order to secure draught and the escape of smoke, the wall behind the hearth-stone slopes backward from the base upward, where it is
connected with a shaft. The jambs are in the form of winged walls of moderate projection, just covering the hearth, and are ornamented in front with a cluster of three non-engaged columns. These columns stand on a single base and have plain shafts, with individual and slightly foliated capitals.

Another interesting detail is that the chimney lintel or architrave, which is straight, is formed of large, dressed stones, the center one being wedge-shaped, with cut-in sides, which are hipped on their face toward the keystone and cut-in on their outward side; thus the whole row is joggled. A method of keying such as this is often resorted to, with modifications in the details of joggings. At Cashel, where there is a fine example of Norman work, the same style is adopted, while in a much later example at Edlington Castle, Northants, in the decorated style, the long narrow stones are given a curious, wavy form, something like the nebule line of heraldry. Joggling, a system of gaining strength, possesses distinct artistic merits. In these are utilitarian details, turned conscientiously to decorative account. This was the advent of the chimney piece. In France, regularly constructed fireplaces seem to have come in with the twelfth century. They were placed against the walls, were provided with jambs to enclose the hearths, and were crowned by architraves supporting well-developed hoods connected with
smoke outlets.

In England, the major examples clearly show that the chimney and smoke flues were early utilized. Nevertheless, regular chimney flues, consisting of square or cylindrical masonry shafts carried above the roof ridge and provided with a more or less ornamental opening, did not come into anything like wide use until the reign of Henry III, when architectural art had made great strides, especially in the development of details tending toward a combination of comfort with decoration. This was the period of the Early English or Lancet style of Gothic, with its development of deep recesses, lancet form of arches and openings, adoption of small slender pillars, often several slender ones being grouped around a larger one, and moderate use of foliage as decorative motifs.

With the general advance in domestic architecture, there came a corresponding development of the fireplace. It had suffered somewhat as a social center when the hospitable but inconvenient open hearth was removed to a side wall, and there more or less cut off by wings and dimmed by a low hanging hood. There was a certain exclusiveness in this arrangement, but as the change had been introduced with a view to the exclusion of smoke, the advantages of an effective framing for the hearth were recognized. As the separate parts that go to make up the complete chimney piece—the jambs or wing-walls, the architrave or lintel, the smoke collector or
hood—were studied, it was seen that they possessed decorative possibilities. The removal of the fireplace from the center of the hall to the middle of one of the walls, or even to an angle of a room, as at Cashel, did not necessarily entail dwarfing. Builders were designing boldly, and the chimney pieces as one of the chief interior features began to be built on a large scale. Everything tended toward this end, for spaciousness was the aim in the hall or other principal room. But then considerations of comfort and expediency brought about a fashion of dividing a hall, almost of placing a room within a room. There were the raised platform, with some kind of dais for the great folk, the carved screens—often of considerable magnitude and closed in at the top—to cut off direct communication with outer lobby and domestic offices; fair oriels, with or without raised floors, and partly enclosed recess closets, forming useful withdrawing rooms; also minstrel and service galleries. All this led to the chimney piece's being developed along lines which made it at once a conspicuous detail, yet further subdivision of a great assembly center.

To some extent the practice of deep recessing, of building the fireplace within the wall's thickness, was abandoned or modified. A long and deep hearth jutted well out into the room, first on a level with the floor, then raised. This was enclosed by wing walls, forming the jambs,
pillars when they existed being used merely for purposes of adornment. These wings were often brought out at right angles from the wall, then turned at right angles again, so as to form niches within the fireplace. From wing to wing an arch was thrown or a lintel formed, frequently carefully keyed by some such picturesque form of joggling, as already mentioned. This supported the great hood above or formed part of the breast, a hood which was frequently carried up close to the wall cornice. This was intended as a smoke collector and a draught inducer, training air and smoke toward the throat of the chimney piece, which was the immediate opening to the smoke shaft. So great were the proportions given that a man could stand upright on the hearth stone, or sit in comfort, protected by the jamb and its inward curving wing.

This was the general character of chimney piece design and is found influencing the construction even in quite moderate-sized dwellings. Usually, however, the chimney corner was the place where the elders sat, entertaining guests, instructing the young, or gossiping with neighbors. In fact, the chimney corner was a refuge from the hurly-burly of the common meeting room, of it, yet set apart, a kind of privy closet associated with all that is most sacred connected with home.

Thus the fireplace, rather than the hospitable board
itself, became even more the spot where the host was found. A rallying point like this, looming large, with conspicuous features, attracting the eyes of all who entered the room, naturally became the subject for careful thought, liberal handling, and even lavish decoration.

Carved stone was the usual material for chimney pieces up to well in the sixteenth century. Such material as was locally at hand was commonly chosen. Hard building material was found in Derbyshire and Northumberland, white and greyish yellow chalk in Kent and Sussex, hard but easily handled sandstone and the more brittle, greyish black slate in Italy, the soft stones in Normandy and Brittany. Bricks, however, were constantly utilized for backs and cheeks, possibly owing to their being cheaper, but also on account of their more or less refractory character as compared with many stones, and their capacity for storing and reflecting heat. Brick was occasionally used for the decorative parts of the superstructure. Brick and stone were practically the only combination to which builders of this period resorted.

The carving often showed great technical skill. Incised lines, slight rounding, deep cutting, and complete relief were used. As a rule, broad effects were sought, the carving alternating with large plain surfaces. These surfaces, however, were frequently painted in vivid colors with the same bold lavishness as bright tints in daring
contrast were applied to the stone walls, carved pillars, and roofs of mediaeval ecclesiastical and domestic building. For reasons that are sufficiently evident, chimney pieces were more often cleaned than walls or ceilings, and consequently only tracings of such coloring have come down, though the indications are sufficient to show how these monumental adjuncts to the hall and the private apartments shone and glowed when the fires were lighted.

So great were the Halls at this period and in the following century that frequently one fireplace was not considered enough. Some Halls were provided with two, placed apart against the same wall, or occasionally placed on opposite walls. The more usual course, however, was to increase the width of the hearth and divide them into two or more fires. The characteristics of this period are the monumental character of the structures, the distinct hood, very generally conical in form, and the breadth and depth of the hearth, with the large opening, often providing accommodation for persons under the hood.
CHAPTER IV
RENAISSANCE FIREPLACES

Stone of one kind or another was the material chosen for chimney pieces prior to the sixteenth century, and it continued in use until the middle of that century, when wood came into favor, gradually usurping the primary place in England and in northern and middle Europe. In Italy, however, wood was rarely used except in conjunction with rubble and good plaster in some of the later examples of the hooded Gothic. At this period hardwoods, generally oak and sometimes walnut, were preferred.

Decoration was carried to a high pitch. Carving, painting, and occasional incrustations were called in to add beauty to the examples. Although chimney pieces continued to be monumental in size and character, they did not project so much into the rooms as in earlier times, for as a rule the hearths were deeply recessed, and the framing, therefore, while retaining its towering aspect, came more on a level with the wall, often having little projection beyond that of the carvings, moldings, and paneling on other parts of the walls. The hood was gradually replaced by a square form of structure covering the breast, often rising to the ceiling and sometimes being carried to the upper floor, which
acted as a foundation or support to the hearth in the room above. This last provision, indeed, is found in a good many of the larger examples even during the preceding period.

While great pains were bestowed on embellishing the frame with carving and color, greater attention began to be paid to the embellishment both of the lining of the fireplace and to its furniture. Hearths were sometimes level with the floor, and then not uncommonly surrounded by a stone kerb, plain or molded, as at Penhurst; or they were raised, forming a platform at a slightly higher level than the rest of the room. The hearthstone itself was sometimes decorated, either with carving in low relief with incised tracery, or as in the early sixteenth century at Lacock Abbey, Wiltshire, was inlaid with a pattern in lead. This was a prelude to the use of glazed tiles, which were first used to line the backs and wings. Late in this century tiles were introduced into construction by the Dutch. But the greater use of wood introduced into construction brought about the use of iron fire-backs.

The fireplace, being as it is, one of the features of natural emphasis in a room, it is not surprising to find the Renaissance architect and craftsman lavishing some of their best efforts upon the adornments at its sides and above it. Realizing that the mantel may often prove a middle ground and point of contrast between architecture, in its narrowest
interpretation, and furniture, they frequently gave rein to a delightful play of fancy in their work, and the Renaissance mantels afford numerous examples of some of the happiest achievements of the versatile artist-architect-craftsmen whose names posterity has been proud to associate with the enduring fruit of their genius. The illustrations are so eloquent that they had best be left to speak for themselves and voice their own message of inspiration to the modern designer.

In Jacques Coer's most beautiful and interesting early Renaissance house at Bourges, there is a great chimney piece which in outline and feeling is really Gothic. It is of carved stone, with stout wing walls, the actual jambs being in the form of columns supporting a broad frieze, the top of which is embattled, and between the crenelations appear bowmen, taking aim at the people in the hall. Above this towers a large conical hood, adorned with two pinnacled dormer windows, with well-carved figures looking out. Another in the same house has an arched opening; the lintel is sculptured with figures in high relief; the breast is composed of three painted arched panels, above which are figures mounted on horseback.

PLATE 19-GRAND HALL-PALAIS DES COMTES DES POITIERS
At the Chateau de Chenonceaux, which was begun in 1515, there are several important chimney pieces, the two most remarkable being in the Guard Room and the Salle de Catherine de Medici. They are both huge affairs. At the Chateau de Blois there is quite a gallery of gorgeous chimney pieces. That in the Salle des Gardes de la Reine, of carved stone, has considerable projection. In the Chambre du Roi the chimney piece is strongly carved, the lintel being covered with rich arabesques as a frame to the Royal arms of France placed in the center. The breast is covered with an open diaper of fleur de lis, forming a background to a large, foliated, crowned H. This same treatment of capitals on the columns framing the chimney breast develops into winged beasts with grinning, grotesque heads. A marked feature here is the bewildering mixture of orders, a weakness of invention betraying that decadence which so soon showed itself in Renaissance work.

In the Musee de Cluny, Paris, which contains an instructive collection of fireplaces, there is one by Hugues Lallemand, brought from Troyes. The jambs are characteristic of certain Renaissance work. They are formed of flat pilasters, the bases being enormous four-toed lion's paws, the capitals, lions' heads. These support an elaborate architrave, deeply carved, the subjects chosen being foliage and fruit surrounding
a central panel filled with a group of human figures. In another example at the Cluny, belonging to the same school, there are termini pillars, while the chimney breast is framed by two nude atlantes, slightly bent under the cornice but showing little evidence of strain.

Before leaving this prolific period of French art, it should be pointed out that much may be learned from the study of examples at Troyes, at Alençon, and at Fontainebleau, providing a fairly wide range, where the dimensions are usually as grandiose as the decorations but the projections slight. Versailles also furnishes many examples, as does the Louvre, which form a good complement to the Cluny, containing many fireplaces designed for the Palace as well as others collected from elsewhere, but usually posterior to the fifteenth century.

A quaint misconception long existed that Italian architects did not know how to design chimney pieces and that the Peninsula had nothing to teach in this direction. No doubt this was a result of the greater attention paid to the sunny parts of the land and also to the decidedly unhappy references to the subject written by the early Italian architects. That the notion is a mistaken one, observant travellers, especially in Lombardy, Piedmont, Venetia, and Tuscany, know. Moreover the fine representative collection of the sixteenth century work at South Kensington bears this out.
PLATE 20 - RESIDENTIAL FIREPLACE - PARIS
In Northern Europe the Renaissance was felt, no doubt, but as regards chimney pieces, the tendency was to adhere to the Gothic hooded type or the rectangular stone. This is evident in the work at Gripsholm Castle, Sweden (1537), where there are many fine examples of hooded fireplaces placed in the angles of rooms, a plan reminiscent of the old, more or less turreted, type of castle construction.

In architecture the Tudor Period covers a wide space of time and many varieties, though it possesses a well-defined general character. In its earlier stages, which may indeed be traced as far back as the middle of the fifteenth century—for like "Gothic" the term is merely a convenient label, invented "after the event" rather to describe a tendency than a bare, chronological fact—it was a softening of the ruder forms of the prevailing style in order to secure domestic comfort.

In it lies the result of an intellectual as well as a material revolution, an awakening, for it marked the rapid decadence of feudalism, the spreading of the base of social stability as a result of the growth of the city, the rise of the petty gentry, and greater prosperity among the yeomanry.

Few things are so amusing and so instructive as to watch the struggles of the heads of one social layer attach themselves to the tail of a higher one. The Tudor spirit marked just such a restless stirring. In architecture the
baronial castle had become an anachronism; the rustic building and the narrow town rabbit-warren were impossibilities to men who felt themselves members of a commonwealth. The Tudor style, with its richness, variety, occasional vulgarities, but at bottom solid and sensible qualities, admirably represented this evolution; we stand aside and witness a flattening out of the Gothic as applied to domestic requirements. It was a spontaneous growth, touched by just that leaning to heterogeneity one might look for from a conglomerate people with so strong an assimilative power as the English.

As for the flattening out process, this was promptly and vigorously applied to chimney pieces. Far projecting, draught-compelling hoods were discarded. Hearth were recessed well into the walls, for better chimneys made drawing easier; with plastering and paneling becoming general, there was less need for the cozy fireplace roomlet within a hall. Flattening the jambs and chimney breasts secured more space as well as greater harmony with other decorative features; yet the fireplace lost nothing of its importance or dignity; indeed, its ornamentation received a fresh impetus and grew apace.

At the first stages of the style under consideration, stone was in general request. It was part of the tradition. Then, toward the middle of the sixteenth century, no doubt
as a result of the paneling of walls, wood came into favor, sometimes for the whole visible parts of the structure, at other times merely for the architrave; while much later there was a lining of stone, thin jambs, and light lintel, entirely framed with carved wood. Plaster was also sometimes called into service, though this was nearly always in combination with wood employed in the entablature, the fireplace frame itself being on stone.

The Jacobean is really an extension of the Tudor style, but more decidedly marked by the Renaissance movement and betraying something of Flemish influence. There are no signs of lessening in the attention paid to fireplaces.

In the Victoria and Albert Museum there are several specimens of this period whose peculiar interest lies in the combination of stone and wood: stone jambs and lintels, generally very slender, usually with plain moldings framing the fireplaces, with carved oak overmantels. One of these, dated 1606, has a rather broad lintel decorated with birds, beasts, and flowers. The carved oak overmantel, supported by fancifully modeled busts, has, on a central panel between Ionic columns, the arms of James I, with a shell-backed niche on each side and a scrollwork pediment. The raised strapwork on the carved base just above the lintel is excellent. In a pair brought from Lime Street and dated 1620, the lower part of stone, the jambs and lintels are
slender and quite plain, but the oak overmantels have panels with good raised moldings and overhanging cornices.

With the advance of the century, the increasing influence of classic design made itself felt. Inigo Jones was at work, and his taste was nearer ancient art than the later exponents of the Renaissance. He designed many chimney pieces, both the simple and the continued classes, that is, those merely forming a frame to the fireplace and having concealed breasts, and those with a superstructure of overmantel. His chimney pieces were moderate in size, having slight projection, square openings, and fairly pure classic members. He preferred the pilaster to the pillar, at all events for the jambs, this mainly to secure his flat panel effects. The fanciful shaping and decoration of the Tudor era were discarded in favor of plain moldings or fluting, lions' masks, and reasonably slender swag-garlands and sprays. He was fond of the running line patterns, undulating and voluted wave forms. Keeping well in mind the laws of proportion guiding classic builders, Jones restricted breadth as well as projection. Where perhaps he excelled was in keeping the decoration down in harmony with the severity of his general outlines. For this reason his simple fireplaces are more satisfying than his continued chimney pieces, as they were a comprehensible way of treating a problem of utility and allowed plenty of freedom for mural decoration.
On the other hand, the continued treatment raised expectations which are not satisfied as they were by the Gothic and the Tudor styles.

On the whole, the Renaissance movement in the hands of men of the sixteenth and seventeenth centuries resulted, so far as our immediate interest is concerned, in a decided incoherence of design and incongruity of decoration. Inigo Jones did much to banish the Gothic and to lead the Jacobean to a sober school of classic architecture. But he was succeeded by an even more imposing genius in the person of Christopher Wren. With all of his leanings toward Vitruvius and Palladio, his admiration for the remains of Greek and Roman splendor, and his scientific bent, Wren loved a certain amount of display. All Renaissance work, no doubt, was ostensibly based on a study of the antique; but so far as decoration is concerned, attention was chiefly directed to an adaptation and development of the grotesques, or "arabesques," of the decadent period of classic art, with the introduction of extraordinary figures and a few other motives. When this degenerated into license, there were men who wished to return direct to the antique, guided by Vitruvius and Palladio, for decoration as well as general design. Among these were Inigo Jones and, to a lesser extent, Christopher Wren, William Kent, and Isaac Ware. In Robert Dods there is an uninspired yet sincere student of the classic. With
Sir William Chambers the classic influence was predominant. He laid down that the opening of a fireplace of moderate size should be near the square, in small ones a trifle higher, and in large ones, lower. In connection with Chambers's theory of proportion, it may be pointed out that the usual rule banishing horizontal lines from a low room, to prevent its being further dwarfed as the result of optical illusion, can often be abandoned with advantage in designing chimney pieces. A broad, low fireplace in a long, low room gives it a comfortable appearance and more than counterbalances any advantage to be attained by employing a narrow "continued" chimney piece in order to increase apparent height. After Chambers came Robert Adam, who professed himself dissatisfied with the heaviness of the Kent school and the mechanical process in decoration introduced by Wren and many of the Gibbons followers. Consequently, his chimney pieces, although built up of classic members and ornamented with classic designs, always fit in with his rooms and harmonize with all else there. Removed from Adam by about half a century, Sir John Soane carried simplicity even farther than Dance or Chambers. The effect is undoubtedly very chaste, but in outline and principle, Soane's chimney pieces remind us of the simple kind that came in with the elaborate Tudor paneling. The unobtrusive Soane types are perfection, but they are deficient in any suggestion of homely sociability.
There are three or four variations of this type at No. 13, Lincoln's Inn Fields, which may be commended to judicious study as the nearest approach to the Greek spirit in architecture as applied to a modern development.
CHAPTER V
AMERICAN FIREPLACES

The story of the early American fireplace is little more than a history of the period of design which prevailed successively in the various European countries, because America was being peopled by colonists who were steeped in the tradition, art, and literature of Continental and English learning and teaching. Although it cannot be denied that the chief part of architectural inspiration and design came to America with the English craftsmen and artisans, other powerful influences wrought abundant results, and the composite was unmistakable in character. Upon its transition to America, this body of forms was grafted upon a stock of growth and precedent which diluted and adapted conceptions and methods of execution to materials at hand by craftsmen who, then as now, were conservative and retentive of the manner of techniques and forms of architectural expression instilled by early training. Meanwhile a variety of influences were at work in regard to the internal and economic aspects of fireplace building, the most potent of which was English.

From the pioneer days, when newly arrived English carpenters built the Elizabethan manor houses around a huge central chimney stack bristling with fireplaces, until the
time of McIntyre and Bulfinch, when the mantel became an exquisite plaything, the hearth was the sensitive barometer of Early Colonial life and progress. The first intrepid explorers lost no time in building themselves crude mud-and-plaster fireplaces, attaching rough shelters to this vital source of heat and cooking. The pioneer family clung close to the gigantic brick hearth in its kitchen-living room during the exciting pioneer days of the seventeenth century. Under its broad lintel of hewn oak, the good housewife kept pots stewing and spits turning. On winter nights its roaring blaze warmed the whole family, huddled close in high-backed benches.

Fireplaces of the earliest houses, particularly those in living room and kitchens, were of generous proportions. Widths of eight and nine feet and even more were to be found. Chimneys of this enormous size were at first built of timber and lined with clay. This practice caused alarm in time, and in 1631 Governor Dudley of Salem ordered that "No man shall build his chimney with wood nor cover his house with thatch." This edict brought forth a change in materials and construction in that emphasis was placed on rough field stone, plastered with a composition of clay and

cut straw.

The descriptions of our earliest homes portray structures of a one-room plan, sometimes a story and a half or two, with the chimney at the end. The fireplaces remained cavernous, often as much as ten feet across and proportionately deep and high. The fire was laid with an immense backlog, sixteen or eighteen inches in diameter, with a green fore-log to keep the embers in place. Sometimes seats were built into the splays of the fireplace, which were the delight of children in the winter evenings. Matches were not known, and the kindling and maintaining of the fire amounted to almost a religious rite. Because of the difficulty of lighting, it was seldom allowed to go out, and the danger of flying embers always burdened the mind of the sleeper. It was also a part of the etiquette of the time that the wooer of the daughter of the house should remain until the fire burned low and carefully bank it for the night before taking his departure, and unfortunate was the young man who failed to bank the fire at the proper time.

From the modest little build-as-you-go Pilgrim homes, with their central fireplaces and picturesque lean-tos, houses began to shape themselves into more formality and repose. Our pioneer builders expressed their knowledge of stonework in terms of wood, of which there was great abundance. Columns and pilasters with turned or carved caps
and bases were made tall and slender as compared with masonry
proportions. Cornices were delicate and ornamented with
molded and carved forms.

As the tension eased and prosperity rewarded the labor
and ingenuity of early colonists, a more gracious and com-
fortable mode of living prevailed. Pure structural necessity
gave way to a more academic viewpoint. The fireplace re-
flected this change and became the central motif of a panelled
wall, at first rather crude and unsymmetrical.

The transition from the early American home with its
lean-to took place in the plan when, for more effective heat-
ing, the chimneys were moved to the end walls. This opened
up the central portion of the house, and in place of the
big chimney, the stately stair hall was introduced, which
established what we speak of now as the "typical" Colonial
Plan.

The houses of New England were usually of frame con-
struction, although there are many examples of brick. Also,
many of the houses were finished with brick end walls and
frame walls in the front and rear. This was done because
already the end walls consisted chiefly of chimneys, espe-
cially when the houses were two rooms deep, with a fireplace
in each room. When the brick end wall was used, the part of
the wall between the chimneys was extended high enough to
conceal the roof. Houses that were built of brick were
likely to be more Georgian in style than Colonial, in which case the design as well as the materials for the house was doubtless brought over from England. The mansions of later Colonial days present all the variations of Georgian influence in their exterior design but usually with that simplification which characterizes the Colonial.

Still the sole source of heat, the fireplace relinquished some of its utility as a cook stove, and pots and grills became more rare. Deep, well-carved moldings, framing the fireplace opening, became more frequent. Responding to the artistic influence of the Renaissance, the paneled wall continued to develop refinements until after the Revolution. Paneling of fireplace walls continued in high favor until the latter half of the eighteenth century, when it gave way to mantelpieces of Georgian form set against plastered walls. Then a new and delicate influence began to be felt from across the sea, that of the Brothers Adam. The day of the great shipping merchant princes was at hand, and with it came a scale of living which can be exemplified by the imposing mansions of Salem and Beacon Hill. Here the fireplace disengaged itself from the woodwork and became a cameo-like jewel set in the wall, enlivened by Dutch tiles, or perhaps by the carving from the inspired chisel of Samuel McIntyre.

In no feature of Colonial design was so much variety
PLATE 33 - DUTCH TILE AND CARVED WOOD MANTEL
PLATE 34 - HAND PAINTED DUTCH TILE
used as in the fireplace, which was the principal feature of every important room. Mantels were of two kinds: one, flush with the wall or chimney breast that broke out from the wall and extended to the ceiling, a type exemplified in Charters Grove, Virginia, where at each corner there is a pilaster that frames the fireplace and makes an architectural unit of the whole; another, flush with the wall, the space over it occupied by an overmantel. A very elaborate example may be seen in the Miles Brewton House, Charleston, with a broken pediment, pilasters and frame, or a very simple one in the Nichols House in Salem, where a molding broken at the corner forms a panel.

Two great Americans entered the fireplace scene in the course of the eighteenth century. The first was Benjamin Franklin, who pioneered a complete departure from the fireplace with his Franklin stove, much prized as an antique today, in which the smoke was trapped and brought down to a low position before being discharged in the chimney. It marked a considerable improvement in fuel efficiency, but located as it generally was in front of a walled-up fireplace, it took much from the attractiveness of the fireside. In the closing days of the eighteenth century there arose to fame a man of American birth who, among other distinctions, became the world's greatest authority on combustion. This man was Benjamin Thompson, born at Woburn, Massachusetts, exiled
during the Revolution with the stigma of Tory, who returned to London in 1796, with the title of Count Rumford. He was much sought as an expert on fireplace troubles, and at one time he testified that there were upward of five hundred smoky chimneys under his care. His remedy generally was a reduction in the size of the fireplace, splaying the sides and sloping the back to give a reflector-type aspect to the fireplace interior, and the use of the narrow throat and smoke shelf at the base of the flue. All of these principles were recognized in the construction of fireplaces after the Revolution.

Early in the nineteenth century America was prompt to take up the enclosed stove as an improvement on the open fireplace. The fixed grate type of open fireplace was found in the more luxurious homes of the middle nineteenth century, but no longer as a major reliance for warmth, a huge base burner often standing in the same room. Prior to the revival of the hearth in twentieth-century home building, there was a long period comparatively barren of fireplace developments.

It must not be thought, however, that the fireplace completely disappeared even during the nineteenth century, but rather that it merely lost its place as the only source of heat, and therefore interest in the fireplace was challenged by the stove. The influence of Thompson was felt, however, in that the opening became smaller, seldom more than four
PLATE 35- MANTEL DETAIL
feet in width, and usually less in height than in width. Almost invariably there was a shelf around the opening with a facing of marble or tiles.

After 1800 all the best American houses contained imported marble mantelpieces. These usually consisted of an entablature resting on columns or caryatides, with a frieze in low relief representing some classic episode, or simply ornamented with bucranes and garlands. In the general decline of taste which marked the middle of the nineteenth century, these dignified and well designed mantelpieces were replaced by marble arches containing a fixed grate. The hideousness of this arched opening soon produced a distaste for marble mantels in the minds of a generation unacquainted with the early designs. This distaste led to a reaction in favor of wood, resulting in the displacement of the architrave and the facing of the space between architrave and opening with tiles, iron, or marble.

Gradually people began to see that the ugliness of the marble mantelpieces of 1840-60 did not prove that wood was the more suitable material to employ. There was something of unfitness in the use of an inflammable material surrounding a fireplace. It came to be recognized that everything about the hearth should not only be fireproof but should appear fireproof. The chief objection to wood was that its use necessitated the displacement of the architrave, thus
leaving a flat, intermediate space to be faced with some fireproof material. This was an architectural fault.

Where the mantelpiece was of wood, the setting back of the architrave was a necessity; but, curiously enough, the practice became so common in America that even where the mantel was made of marble or stone, it was set back in the same way, so that it was unusual to see a fireplace of that period in which the architrave defined the opening. The use of an inner facing, called a retrecisement, became common, probably because such a device made it possible to use less fuel. Its use did not disturb the proportions of the mantel as related to the room.

The reaction from the bare, stiff room of the first quarter of the present century resulted in a general craving for knickknacks; and the latter soon spread from the tables to the mantel, especially in America, where the absence of the architectural overmantel left a bare expanse of wall above the chimney piece. The use of the mantel as a bric-a-brac shelf led in time to the lengthening and widening of this shelf, and in consequence to the enlargement of the whole chimney piece.

In modern American architecture, fireplaces are returning to the home and are finding a welcome at the hands of those who first thrust them forth as unwilling prodigals. The bare and barren aspect of the new, domestic architecture,
a thin reciprocal to life, has induced an awakening desire for means to attack the bleached death's-head (the so-called fireplace in the modern house). A call, inarticulate but clear, has gone out for help, and the fireplace for use—not for ornament or echo—is the first blow offered in the coming assault.

The mantel began as architecture and ended, in its final development, as furniture. In modern practice, the mantel is treated sometimes as one, sometimes as the other, with rather a leaning, perhaps, to the architectural interpretation. A mantel without a fireplace, a phenomenon one sometimes encounters, is an anomaly and has no more significance or use than a wagon without wheels. When such exists, common honesty and common sense demand that a fireplace be made or else that the mantel be altogether eliminated.

Whether we choose to regard the modern mantel as architecture or furniture, there are two facts that cannot be denied. By its very position and the space it occupies, it is usually a dominating factor in the composition of a room, and as a focal point and important item of the fixed decoration, it naturally serves as an intermediate link between background and furniture.

The living room is the key room in the American house plan, and its general qualities in large measure determine the success of the house. Since the living room is the
principal recreational unit of the home, it must provide a setting for the usual recreations of the family group. First, there must be the provision for seating a conversational group. This is best centered around the fireplace, which serves as a focal element socially and decoratively.

There is such cheerlessness without a fire to animate an otherwise lifeless winter room, that actual need is driving most of us to accept what best we may. An ornamental mantel surrounding a mirror or blank wall may serve indifferently as a wall trimming, but as a substitute for a fireplace it is about as welcoming as a shut barn door.

The open fire is not only a thing of use and beauty in itself but the symbol of the cycle of life as well. It has as much meaning, with contemplative approach, as the person who looks at it. It is creative, awakening our aspirations while it soothes our senses and smoothes our wrinkled spirits.
CHAPTER VI
SUMMARY AND CONCLUSIONS

Fire has had an important influence upon architecture, and this influence has been expressed from the earliest period through the medium of the fireplace.

The fireplace was developed as a means of mastering, controlling, and maintaining fire for the purposes of heat and cooking. In reality, the fireplace in the Prehistoric Age was merely a container for the fire, and during this period it made no architectural contribution.

With the general advance in domestic architecture, there came a corresponding development of the fireplace, especially in details tending toward a combination of comfort with decoration. During the latter half of the Middle Ages, the fireplace began to take architectural form, characterized by the monumental structure, the distinct hood, and the breadth and depth of the hearth. It became the center for the gathering of all groups, whether they were restricted to the members of the family or extended to include large and formal groups of guests.

The Renaissance witnessed the height of architectural development of the fireplace. This period affords the most numerous examples of the work of the artist-architect.
craftsman as he gave the world the most illustrious examples of fireplace architecture. During the latter part of the Renaissance, although the fireplace remained the center of social activity, it underwent a structural change which resulted in its being recessed into the walls for the practical reason and scientific development of controlling the draft.

In America the fireplace was the center of architectural interest until the beginning of the nineteenth century, when stoves and mechanical heating devices retarded its progress for about fifty years. A revival of architectural interest focused itself on the fireplace early in the twentieth century, and since that time its contribution has been recognized as an influential element in the socialized, functional home of modern America.
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