# POALIOPSEST

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### THE PURPOSE OF THIS MAGAZINE

The Palimpsest, issued monthly by the State Historical Society of Iowa, is devoted to the dissemination of Iowa History. Supplementing the other publications of this Society, it aims to present the materials of Iowa History in a form that is attractive and a style that is popular in the best sense—to the end that the story of our Commonwealth may be more widely read and cherished.

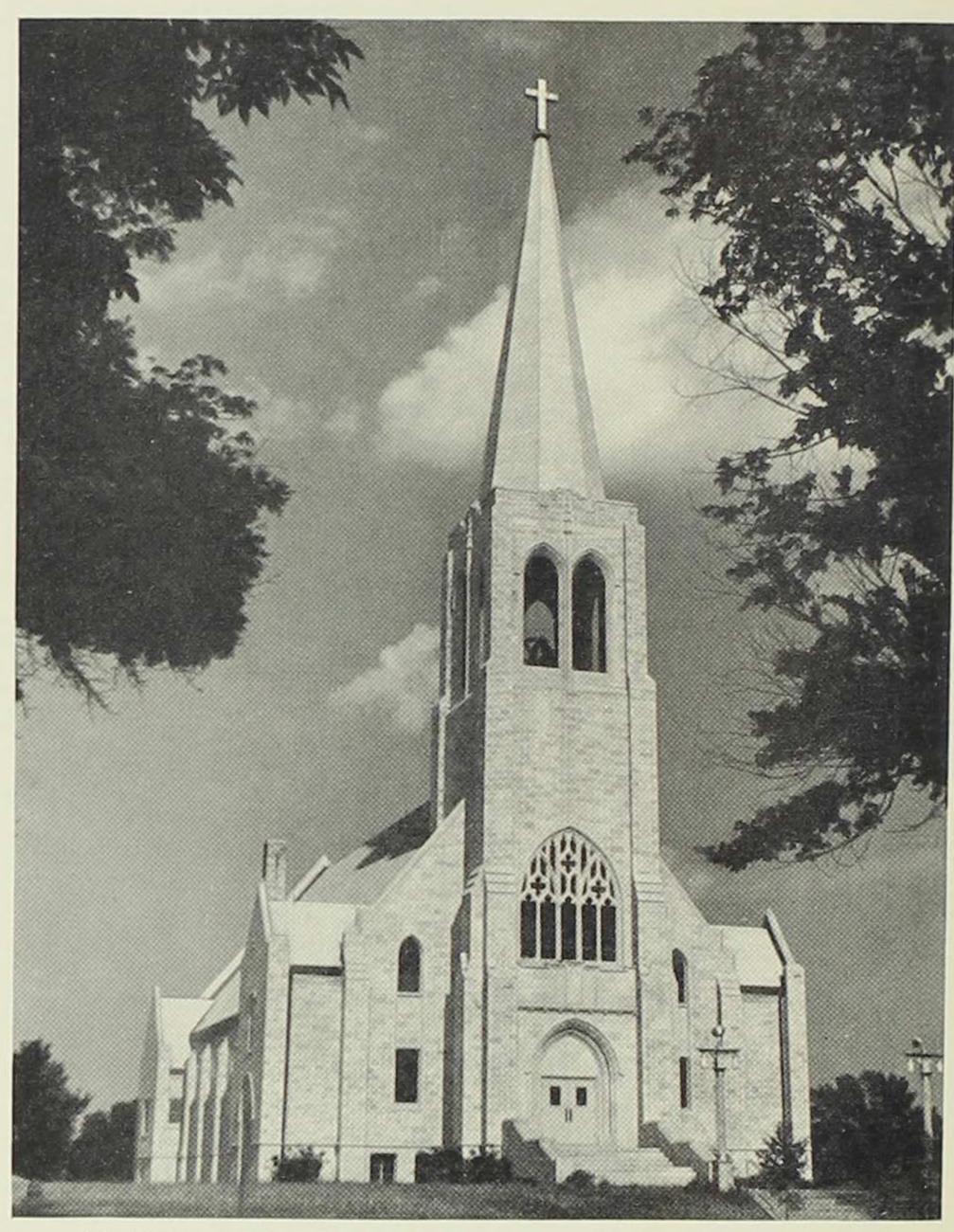
BENJ. F. SHAMBAUGH

#### THE MEANING OF PALIMPSEST

In early times a palimpsest was a parchment or other material from which one or more writings had been erased to give room for later records. But the erasures were not always complete; and so it became the fascinating task of scholars not only to translate the later records but also to reconstruct the original writings by deciphering the dim fragments of letters partly erased and partly covered by subsequent texts.

The history of Iowa may be likened to a palimpsest which holds the records of successive generations. To decipher these records of the past, reconstruct them, and tell the stories which they contain is the task of those who write history.

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MAMRELUND LUTHERAN CHURCH STANTON IOWA

# THE PALIMPSEST

EDITED BY RUTH A. GALLAHER

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# Biography of a Church

The Sweden of the 1850's did not offer a very bright outlook for its common people. The large estates were operated under a "torp" system which gave employment to a large number of under-privileged men and women. Under the "torp" set-up, a peasant had a small cabin, usually in a remote part of the estate, and a meager plot of ground on which he and his family could plant grain and vegetables for home use. For the privilege of cropping this plot and occupying the cabin, the tenant agreed to perform so many days' labor in the fields and about the grounds of the estate. The work was all done by hand, with spade, hoe, and scythe, and the hours were long.

It was no wonder these workers listened eagerly to the stories of opportunity and freedom in America. The States of Illinois and Minnesota attracted the first streams of immigrants from Sweden. Some of the earlier immigrants crossed the Mississippi River and located in Jefferson

County, Iowa. The place selected for their new home was hilly and wooded and not particularly adapted for the kind of farming the more fertile treeless prairie offered, but the resemblance of the terrain to the Sweden they had left may have guided them in their choice. They called the place New Sweden. The railroad caused a number of Swedish families to locate at Burlington and a Swedish Lutheran congregation was organized there in 1859. In 1864 the Reverend Bengt Magnus Halland, recently ordained a minister in the Augustana Synod, was called to take charge of the Burlington congregation.

The ceaseless stream of immigration with its innumerable covered wagons impressed this twentyseven year old man who had been born in the
province of Halland, Sweden, on October 15,
1837. He began to wonder about the religious
future of these settlers. Would it be possible to
formulate some plan by which at least his own
countrymen could be brought together in a congregation of their own faith? Finally he approached the men in charge of the land sales at
Burlington with the proposition that he be allowed to select a tract of land along the railroad
on which he would seek to settle Swedish homeseekers.

His plan evidently met with favor, because

sometime later he set out to view the land adjoining the new railroad in quest of a location for this
laudable enterprise. His final selection embodied
the tract of land between the West Nodaway and
the East Nishnabotna rivers in Montgomery and
Page counties.

That this was a wise choice was proven later as the result of a survey undertaken by an eastern university to find the place in the entire world best suited for general farming purposes. The selection as finally made embraced a tract within a radius of fifty miles of Clarinda, Iowa. The location chosen by Rev. Halland is close to the center of this area.

Since the primary ambition of Reverend Halland was the establishment of a church home for his countrymen, he began the quest for the site for his church as soon as the railroad company had platted the new village in Montgomery County. He wanted the church building to be seen far and wide, bearing witness to a workaday world of the Savior of mankind. He had no funds to build a church but he did have a site, for the railroad company had donated two lots for this purpose. These lots, the initial contribution to the church, were on the highest part of the site laid out for the new town.

The question of naming the town came up in

1869. Rev. Halland suggested that it be named Halmstad, after the leading city in the province of Halland, Sweden, his former home city. This name was too much of a tongue twister for the New England gentlemen who were the sponsors of the new railroad and they decided that the town should bear the name of Stanton.

The first religious service in the new settlement was conducted by Rev. Halland at the camp of the pioneer settlers. The people sat on the grass on the side of a hill amid the flowers, clouds drifting overhead, and the prairies encircling them. Perhaps this setting brought to the minds of the people that gathering on the hillside when the Master spoke to the people, guiding and inspiring mankind. Every Sunday after that, Rev. Halland held services in different parts of the settlement and on May 25, 1870, the Mamrelund congregation at Stanton came into being. The name came from an association of the fine grove of trees on the townsite with the story of Abram and the Oaks of Mamre.

At first, services were held in the homes of the immigrants, but one Sunday morning the floor supports of the dwelling gave way, almost causing a tragedy, and the forty-one charter members decided that a church must be built. At a meeting held in October, 1870, the congregation decided

to build and a Mr. Olof Olson was appointed to have charge of the construction; by Christmas the building was enclosed. It was forty feet long and thirty-two feet wide, with a small addition for sacristy and tower. The spire was to be ninety feet high. The church was provided with a temporary altar table and a pulpit. Planks resting on nail kegs at first served as pews. Lack of funds delayed its completion until 1875, when the Iowa Conference of the Lutheran Augustana Synod of North America held its meeting in Stanton. The cost was approximately \$3,000.

The congregation was not large during the first years. On the first of January, 1873, it numbered only 133 communicants, and the entire membership was 229, but by January 1, 1876, it had increased to 300, counting children to 562. In 1883 the communicant membership was 571 and the total congregation included 994 persons.

A survey of the spiritual condition and development of the congregation during this period indicates that in the main the pioneers brought with them to the new home a reverence for the word of God and a respect for the ordinances of the church. Infants were presented for baptism as early as possible and members gave the required notice of their intention to partake of the Lord's Supper.

For thirteen years Rev. Halland shared with the struggling settlers the endeavor to build here in the wilderness the community he visualized. On foot and on horseback, in fair weather and foul, kind, patient, and forbearing, he struggled towards the goal he had set for himself. As part of his pastoral duties he planned and established a home for destitute orphan children in this new settlement. But, as the years passed, Rev. Halland felt that after this long period of service in and for his beloved church he should ask to be released, and he submitted his resignation at the annual meeting held in January, 1883. The resignation was accepted and on July 22, 1883, the beloved pastor preached his farewell sermon. The next few years found him working about the community and surrounding territory until his death on August 17, 1902. He was buried in the Mamrelund Cemetery.

The new pastor who arrived at Stanton in September, 1883, was Rev. Anders Johan Ostlin, born in Sweden on September 20, 1848. His father was a sergeant in the Swedish army and an earnest Christian. Anders emigrated to America and came to Paxton, Illinois. Later he entered Augustana College and in 1877 he was graduated from the Theological Seminary at Rock Island, Illinois.

It fell to the lot of Rev. Ostlin to supervise the building of the second Mamrelund Church. Plans were adopted at a meeting held on January 15, 1884. According to this plan, the new church was to be 100 feet long (not counting the tower extension) and 60 feet wide with walls 24 feet high. A beautiful tower and a spire were included in the plans. The tower extension was to be 20 feet square, eight feet inside the church building and 12 feet outside.

The plans called for a church built of stone and quarries on the farm of John F. Johnson, southwest of Stanton, still known as the "Stone" Johnson farm, furnished much of the building material needed. So much labor was required to quarry, cut, and haul this stone that it was finally decided to use wood in some places and the heavy sidings were of wood trimmed and grooved. Eighteen carloads of lumber and 109 kegs of nails were hauled up the hill to the building site before the church was completed. I. Alfred Isaacson prepared and lettered the cornerstone. This beautiful church building was to serve the community for the next 55 years.

The new church became a busy place. Rev. Ostlin had taken an active part in the construction of the building and he was a leader in the community as well as in the church. Young and ener-

getic, he dressed well and carried himself with dignity, especially in the sanctuary. Older persons recall that he used to walk up the aisle in stately fashion carrying his silk hat tilted against his breast. He was a good horseman and took de-

light in driving a good team.

He did not approve of the custom then in use in many churches of all the men sitting on the right side of the sanctuary and all the women and small children on the left. He insisted that fathers ought to help care for the restless little ones and if necessary take them outside. His sermons were short and to the point. In those days there was no language problem; Swedish was used exclusively both in the church services and in the Sunday school.

During this period about 400 children attended the parochial school and Sunday school and the Mamrelund Lutheran congregation included about 570 confirmed members. The main organizations were the young peoples' societies. The congregation in those days was divided into routes, four in the country and one in town. The young people were gathering money for a pipe organ by the way of coffee socials, concerts, auctions, and oyster suppers. Even a necktie social was held. The community centered around the activities of the church and there it was that relatives and friends

from all parts of the congregation met after services, visited, and exchanged news.

On July 15, 1894, Rev. Ostlin gave up his pastorate at Stanton and moved to the First Lutheran Church in Kansas City, Missouri, but when he died on February 21, 1920, his body was returned to Stanton for burial in the Mamrelund churchyard cemetery.

The Rev. J. E. Rydbeck was called to be Rev. Ostlin's successor, beginning his ministry in Stanton in December, 1894, at the age of twenty-five. During his ministry in Stanton, a home for the organist and the teacher was erected on the church grounds, the present parsonage was built, the first pipe organ was installed, and the Young People's Society was reorganized into a Luther League. To the regret of the congregation, Pastor Rydbeck resigned on February 28, 1903.

His successor was Rev. C. A. Randolph, who wrote of his pastorate: "The seven years in Stanton are to me the most interesting years in my life. It was with trepidation that I accepted the call from Mamrelund. Would they be able to hear me? Did I have the talents to minister to an eighthundred membership? The fear of not being heard when in the pulpit soon vanished and I found that the needs of a large church are the same as a smaller church."

A rather amusing incident happened when the organist resigned. The task of playing at the service the following Sunday fell to Mrs. Randolph, who had never played a pipe organ. After the service Rev. Randolph said to his wife: "You played just as well as I preached." She responded quickly: "Nej, gick det sa daligh?" ("Did it go

as poorly as that?")

When the church needed repairs—redecoration of the altar, a metal ceiling, and a new pulpit-Rev. Randolph took upon himself the job of personal solicitation and obtained the best collection that had ever been taken in Mamrelund. The artist decorator asked Randolph what he should do with the altar painting. Rev. Randolph replied, "Cover it up with paint." A few days later a deacon asked the pastor, "Where is the altar painting?" "It is where it has always been", said the pastor. Some of the older members of the congregation did not like the new altar; they thought it looked too much like that in a Catholic church.

In January, 1911, Dr. Peter Peterson began his work in Mamrelund. Many people could not understand why Dr. Peterson would leave the First Church in St. Paul, Minnesota, to answer the call to Stanton, but he apparently never regretted the move. Members of the Mamrelund Church were numerous enough to control the affairs of the entire community. The town of Stanton was prosperous. The bank stood firm on solid foundation. The stores did a thriving business, the school was crowded. That period of 1911–1916 possibly marked the height of prosperity in this community. The inflation of land values of the post-world war period had not yet come. The people were content to till their farms, build their homes, increase their savings, and enjoy life.

Dr. Peterson was greatly interested in good music and he had Handel's "Messiah" rendered in the Stanton church for the first time in 1915. In the meantime, the organ had been moved from the balcony to the front of the church. It was during his ministry that the congregation bought eight acres northeast of town for a new cemetery.

Dr. Peterson, a powerful preacher and a pastor who put his whole soul into the work in his church, resigned on November 13, 1915, to accept a call from the Immanuel Church in Chicago. His last public appearance at Stanton was the seventieth anniversary celebration in the new church on Saturday afternoon, May 25, 1940. His part of that afternoon's program was to close with the benediction. Noting his condition, friends sought to dissuade him, but in vain. He walked to the altar, knelt there at length, and upon turning to the au-

dience he looked heavenward and cried, "Bless the Lord, O my soul, and all that is within me bless His holy name. Bless the Lord, O my soul and forget not all His benefits." Then, turning from the altar, he raised his hand high and pronounced the benediction. He died in Chicago the following week.

The new pastor, Rev. O. A. Elmquist, preached his first sermon in Mamrelund on Sunday, October 1, 1916. The years he spent in this congregation were exacting and trying. World War I, with all its heartaches and tears, was being waged at that time. Seventy-three members of the congregation were called to the colors. Church and Sunday schools in any foreign language were forbidden for a time and the Swedish language never again regained its pre-war prestige in the congregation.

Dr. Elmquist believed in the study of the Bible; study classes were held during the week and the largest Bible class in the history of the church greeted him every Sunday morning. Rev. Elmquist resigned on June 22, 1922, to become Conference Field Secretary and that fall Rev. J. T. Kraft became the pastor of Mamrelund. He used English and Swedish equally well and some services were in English, others in Swedish. There was a large orchestra and always a splendid choir,

besides other smaller musical and singing organizations. A three-manual Moiller organ was purchased in 1928 for \$16,000.

Rev. Kraft resigned in the spring of 1933 and Rev. A. Leonard Smith, with his wife and two children, came on January 15, 1934, to take up the work at Mamrelund. Now, all the meetings of the congregation were to be held in the English language, but two services a month in Swedish were held during the hour before Sunday school. A memorable event of this period was the celebration, on April 29, 30, 1934, of the fiftieth anniversary of the laying of the cornerstone of the church. That Sunday morning, before a gathering of 1,085 people, a confirmation class of 50, 36 youths and 14 adults, made their vows.

Shortly after midnight, or early Sunday morning, August 28, 1938, the Mamrelund Lutheran Church of Stanton was destroyed by lightning and fire. A description of this fire was written by Rev. Smith: "Billows of smoke and fire pressed angrily at every window seeking a way out. The large window above the entrance was always beautiful to behold, but never like now. Its beautiful reproduction in colored opalescent glass of Thorwaldsen's statue of Christ with His outstretched arms and inviting hands seemed all at once to appear alive. How could He stand there

so unafraid, so calm, in the midst of such destructive fury? How like the Savior at all times;—and as long as He stood there not a flame was seen on the outside of the church. But when the window suddenly collapsed and Christ disappeared, instantly the church became enveloped by hungry flames leaping forth from every window."

In the light of the glowing embers, members of the congregation gathered a block away on the porch of the E. E. Mollenhoff home, and prayed for another church home. It was Sunday morning, 2:30 a.m. Paul's comment, "All things work together for good unto those who love the Lord" was the text for the sermon and Nehemiah's ringing challenge, "Come, and let us build", was its climax. Unaccompanied, but with power, the group closed this unusual service by singing "A Mighty Fortress Is Our God".

The local school board announced at the close of that out-door service that the high school gymnasium would be available for all church services not in conflict with scheduled programs of the school. The offer was gratefully accepted and at 10 a.m. that day the Sunday school met in the school building; at 11 o'clock, the congregation assembled. After the service, the congregation went in a body to the ruins, where the cornerstone was opened and its contents examined. Every-

thing had been well preserved. The contents of the church vault had not fared so well. In the drop from the main floor to the basement the vault had opened, and many of the old records were destroyed.

On the Monday evening after the fire, the board of administration met at the parsonage to talk about a new Mamrelund and committees were nominated. At a special meeting May 1, 1939, it was agreed that the new church be entirely of stone.

The foundation stone of the old church was crushed by volunteer labor and used in the concrete of the new foundation. The bell was recast and placed in the new tower. The church is of Indiana Bedford stone and is of Gothic design. Its over-all dimensions are 50 feet by 116 feet, with a tower and spire 150 feet high. The ball and the cross atop the spire are of stainless steel. To the right of the chancel is the Pioneer Chapel. Above the entrance to the church is a huge balcony window, with a reproduction in stained cathedral glass of Thorwaldsen's statue of Christ, presented by non-members and non-resident confirmants and dedicated to the memory of the pioneer pastor, Rev. Bengt Magnus Halland.

One year was required for the erection of this church and its cost approximated \$100,000. On

Sunday, May 26, 1940, it was dedicated and the seventieth anniversary was celebrated. In 1944 the Mamrelund Lutheran Church became debt-free and the note was burned with ceremonies on June 9, 1944.

And so this biography of Mamrelund comes to a close. It is the story of "the little white town with the big white church"; it is dedicated to the faithful, courageous, industrious, God-fearing men and women who came as pioneers to Mamrelund.

Lois A. McIntosh

## The Geode Beds of Iowa

During the years from 1847 to 1850 a party of scientists under the direction of David Dale Owen, United States Geologist, made an intensive survey of the Upper Mississippi Valley from St. Louis to the Canadian border. The results of this study were presented in a thick volume entitled Report of a Geological Survey of Wisconsin, Iowa, and Minnesota, published in 1852. In describing the formations in southern and western Iowa, Owen wrote of one series of carboniferous limestones: "At its base we have beds . . . especially characterized by enclosed Geodes, lined with crystals of quartz and calcareous spar." This may have been the earliest scientific note on the subject of geodes in Iowa to be found in geologic literature. These geodiferous beds" have a maximum thickness of some forty feet.

These geodes were nothing new to the geologists of Owen's party. In certain strata of the Mississippian rock of southeastern Iowa, northeastern Missouri, and western Illinois there are, perhaps, the most famous geode beds in all America. Only Russia, it is said, has formations containing geodes equalling those of Iowa in the

quantity and quality of the geodes they produce. Not all Iowans, however, are familiar with these geological curiosities. What, where, and why is

a geode?

The earliest mention of the term "geode" dates from 1619, so it will be seen that it is not by any means a new word. Coming from the Greek word meaning earth, or like the earth, the word literally means earthy. Early mineralogists supposed that all true geodes should contain some loose or earthy material, such as loose crystals of quartz, calcite, pyrite, dry mud, or other mineral substances.

John Hill, in his *History of Fossils*, published in 1748, used the word geode in its modern connotation and showed a colored plate with fine engravings of geodes. What is probably the first formal definition ever written for these unique objects, appears in William Phillips' treatise on mineralogy, second edition, dated 1823: "A geode is a hollow ball; at Oberstein, in Saxony, are found hollow balls of agate (chalcedony) lined with crystals of quartz, or amethyst, which are termed Geodes." This usage, first introduced by German mineralogists to designate a hollow nodule of any mineral substance, often lined with crystals, still holds good today.

Geologically, the term geode became common

in this country almost simultaneously with the first settlement in Iowa. When the early pioneers filtered into the southeast corner of the territory, many were impressed, no doubt, with the singular beauty of these objects, which in certain sections lay scattered over the ground like "potatoes in the field." They were soon recognized by their correct name and the term geode became, and yet remains, almost a common household word in that section of Iowa.

In Volume I, of the Report of the Geological Survey of the State of Iowa, published in 1858, State Geologist James Hall noted that, "Below the Magnesian limestone, we find a deposit of marly clays and argillaceous limestones filled with spherical masses of siliceous material, termed geodes; many of which are hollow, and, on being broken, present magnificent crystals of quartz, calc spar, dolomite, zinc blende and iron pyrites, as well as mammillary and botryoid forms of chalcedony."

Charles A. White, in his Report on the Survey of the State of Iowa, published twelve years later, in 1870, likewise mentions the "Geode beds" and gives a good description of their character and extent. Geodes, White says, "are more or less spherical masses of silex, usually hollow and lined with crystals of quartz. The outer crust is rough

and unsightly, but the crystals which stud the interior cavity are often very beautiful. The prevailing kinds of crystals are of quartz, but those of calcite are quite common in the same geode. Sometimes they also contain crystals of the sulphuretes of iron and zinc. They vary in size from that of a walnut to a foot in diameter. The crust of the geodes in this formation is invariably silicious, but geodes are found in the soft magnesium limestone of Devonian age in Bremer county, the crust and lining crystals of which are carbonate of lime, some of which are quite free from silex."

These "geode beds" of southeastern Iowa are exposed in many places along the deeply eroded valleys of the Skunk, Des Moines, and Mississippi rivers, and their tributary streams. Throughout the years they have been visited by literally thousands of individuals bent on collecting geodes. For more than a century this has been a favorite pastime, not only for the "natives" of the region, but for others, often coming from great distances. In early days, numerous scientists and collectors of Europe were also frequent visitors, and practically every famous geologist in America has visited the region, marveling at the great diversity and beauty of the geodes found so abundantly.

Geodes have been collected with many objects in view. They have been much appreciated lo-

cally for their true loveliness and beauty, but they have been considered largely as curiosities and used principally for ornamental purposes; they have adorned the yard of the humble pioneer's cabin and have been placed proudly upon the "whatnot" in the mansion of the city dweller among the choicest bric-a-brac. Great quantities have been used in the construction of rockeries and grottoes, and for borders along walks and flower beds on private lawns, as well as in many parks and public places. A footbridge in Saunders Park at Mount Pleasant is built almost entirely of geodes, some of the finest of the region; and a grotto at West Burlington contains literally thousands of the choicest geodes obtainable.

Throughout past years, geodes have been gathered and carted away by the hundreds of thousands, even whole truckloads at a time, but so numerous were they in the beginning that the supply, though gradually becoming depleted, is still far from exhausted. They may still be found in abundance by those who seek diligently for them, especially along the creek beds after a freshet, where the flood waters have disturbed the gravel beds. They are also to be found at low water below the mouths of the tributary streams entering the larger rivers.

Externally, geodes are most unattractive. They

might even be noticed for their sheer ugliness, being only slightly more prepossessing in outward appearance than any ordinary cobblestone. Internally, however, they may properly be classed as one of Nature's "heavenly" treasures, for they are filled with crystals of indescribable beauty. These are exposed to view only when the geode is broken open. Until that is done, no one can actually tell what each one will yield. Many are the rare prizes found therein, but some turn out to be duds.

Those most highly prized by collectors are partially hollow and lined with crystals, but in many cases the process of growth was prolonged until the cavity was entirely filled. In most instances geodes consist of a relatively thin shell of chalcedony, lined with bright, transparent crystals of quartz. These sparkle brilliantly in the sunlight, when first exposed to the light of day, after having existed in midnight darkness for perhaps millions of years.

Some less common geodes are lined with white or bluish-gray botryoidal (grape like) chalcedony, or, perhaps, with colorless crystals of calcite. In addition to the principal minerals which line it, the cavity frequently contains accessory minerals such as crystals of lead (galena), zinc and iron sulphide, and (more rarely) innumerable other

minerals, more than forty in number. Some exotic ones have their entire openings filled with powdery white kaolin; others are filled with water. In the bed of a small creek, opposite Fort Madison, near Niota, Illinois, peculiar geodes have been found entirely filled with black viscous bitumen (petroleum). Near Farmington, on the Des Moines River, brownish and reddish geodes may be found. These appear to have been vitrified by intense heat.

Geodes are not always rounded; in fact, some do not even remotely resemble this shape, being irregular and nodular. A few are even flattened, apparently having been crushed by the weight of overlying layers of rock. They vary in size from those no larger than a peanut, found between Montrose and Keokuk, up to giant geodes as much as three feet in diameter, which may be seen in the collection of R. G. Veith of Keokuk. In general, however, geodes are from three to six inches in diameter, and all sizes, more or less, are to be found at almost any given horizon or locality. Apparently the matter of size is purely incidental.

The size and shape of each geode, of course, depends upon the size and shape of the pre-existing cavity in which it was formed. While the origin of geodes is largely a matter of academic speculation it has also been of more or less interest to

laymen. Any child may recognize a geode, but even geologists are not fully agreed as to how they are formed. It is evident that they were made by the deposition of silicious and other material carried by percolating ground-water passing through the rocks, but neither the cause of the cavities nor the material in solution is known for certainty.

Naturally there have been no lack of theories to account for the origin of geodes. One of the earliest was presented by James Dwight Dana in his Manual of Geology: he held that geodes were formed by the deposition of mineral matter in cavities, formerly occupied by sponges. This idea is now practically abandoned for lack of substantiation. A similar theory advanced by Nathaniel Southgate Shaler, in 1878, suggested that the cavities were formed by the heads of crinoids, but this idea was also later abandoned, since no plates of the crinoids were ever found directly associated with the geodes. The bulbous roots of certain crinoids were likewise considered as the cause of cavities, but it remained for Dr. F. M. Van Tuyl, writing in the reports of the Iowa Geological Survey, to advance what appears now to be the most acceptable idea. He concludes that the origin of geodes was intimately related to the calcareous concretions which may be observed in some of the exposures. These nodules, he maintains, may be readily removed by solution, thus providing the necessary cavities in which the geodes could be formed.

While the "geode beds" underlie much of southeastern Iowa, it is only where they have been exposed along streams that geodes may be found. Obviously it will be impossible to list every location, even though all were known. One of the best, and perhaps the classic area for collecting geodes, is along Mud Creek, a mile or so east of Lowell, in Henry County. Here great quantities have been weathered out of the shales, and have been collected in the bed of the stream near where it empties into Skunk River.

It is here, in a beautiful nature setting, along the boundary line between Henry and Des Moines counties, that Geode State Park has been located. Several hundred acres of land have been acquired, on which a large artificial lake is to be built, and the park is to be developed into a fine recreational center for southeastern Iowa. Already a splendid shelter house has been built out of native limestone by C.C.C. boys of depression days. This building is said to contain one of the largest open fireplaces in any of the parks in the United States.

In the vicinity of Keokuk, along Soap Creek, there are also excellent opportunities for collecting geodes. Here they are more numerous than in

other areas, but they are also more fragile and great care must be taken in "cracking" them or they will shatter into a large number of pieces. The beauty of the interior of the geodes obtained here is often enhanced by the presence of crystals of dolomite and ankerite.

Good geodes may also be found in numerous exposures on both sides starting just below Keokuk and proceeding up the Des Moines River almost as far as Farmington. There are also geode beds in Missouri, along the Fox River, near Wayland, and in Illinois between Nauvoo and Quincy.

The State of Iowa may be justly noted for her fine educational institutions, for her corn and her hogs, and for the excellence of her manufactured products, but in the mineralogical field she is probably as widely known for her famous "geode beds", which have contributed thousands of specimens of unexcelled beauty and rarity to almost every museum in the world, both large and small, and to the cabinets of hundreds of private collectors scattered far and wide. Without doubt the many beautiful geodes found within her borders have added much to the interest of scientists, as well as of curio hunters, in the State of Iowa.

BEN HUR WILSON

## A Destined Land

"Sioux City . . . is the terminus of civilization of the upper Missouri", the St. Louis Democrat declared in 1858, but the Sioux City Eagle asserted that the young frontier town was destined to become "a place of no small magnitude" and a market center for "a large scope of country". No section offered greater inducements to settlers than Woodbury County, Iowa, according to the Eagle. There the best land was still "untouched". There a home and farm could be obtained embracing "as fine farming land as can be found anywhere".

Dr. S. P. Yeoman, Register of the Sioux City Land Office, estimated in 1858 that 300,000 acres in Woodbury County were "susceptible of immediate and easy cultivation". That year there were about 100 "practical farmers" in the county, each of whom had an average of 40 acres under cultivation. Assuming each had purchased or preempted a quarter section they would together control 20,000 acres, leaving a balance of 280,000 acres of first class land open to settlement. This was the equivalent of 1,750 quarters in Woodbury County alone. Moreover, there were within

the county some 265,000 additional acres "well

adapted to grazing purposes".

Those who wished to start farming before the Civil War might well have asked with the Sioux City Eagle: "Where . . . will they see a better prospect for doing so than in Iowa — Western Iowa." With \$200, the Eagle pointed out, a man might purchase a quarter section. For another \$100, thirty-three acres could be broken, and it would cost \$200 to enclose the field with "a good plank fence". With the further investment of his labor a man could raise 1,000 bushels of corn, 300 bushels of potatoes, 50 wagonloads of pumpkins, 500 bushels of turnips "and as many watermelons, cucumbers, muskmelons, beans, cabbages and other vegetables as will be used in a large family." Indeed, the editor of the Eagle believed, the original investment could be recovered and a handsome profit made the first season. "In a few years", he declared, "you will be rich and can go back and buy out the rich neighbors you left behind."

Dr. Yeoman noted other advantages in Wood-bury County. He stated that "nature has left nothing to do in the way of improvement of the soil." Here "eagerly sought" fertilizers were unnecessary and "without value." Indeed, he observed, not even the most skilled chemist could

have made any improvements in the composition of the soil elements of Woodbury County."

Of building and fencing materials, Dr. Yeoman noted, "there is not an abundant supply"; within the county there were less than twenty-five sections of "fair timbered land." The timber was largely along the Missouri River and other streams, but the most valuable varieties were on the Little Sioux in the Smithland area. However, he in effect advocated a program quite comparable, on a small scale, to later and better known conservation programs. In the first place he opposed exploitation of the timber resources of the county for individual profit. "There is probably a sufficiency", he stated, "if properly distributed in accordance with a liberal spirit" for the welfare of all the people in the county. Secondly, he advocated economy in consumption. He opposed construction of zig-zag rail fences, which was "first suggested as a convenient mode of disposing of surplus timber." He believed four times as much fence could be constructed from the same quantity of timber, if the trees were sawed into lumber and the fence was built straight instead of zig-zag. Thirdly, he believed the supply could be increased by an intelligent program of reforestation and prevention of prairie fires which destroyed great numbers of young trees. "We may as

readily cultivate the most valuable varieties of timber as the grain in our fields", said this early conservationist.

While Dr. Yeoman foresaw that corn would "undoubtedly be the great staple" of western Iowa, he believed that more attention should be given to wheat-raising. He pointed out that even in 1858 flour imports into Woodbury County exceeded \$15,000 in value. This money, he stated, might just as well remain at home among the farmers if they would only turn to the production of wheat. Moreover, this would stimulate a mill-

ing industry, which was much needed.

He also insisted that "every interest calls upon us to devote more attention to the dairy". Neither butter nor cheese had ever sold for less than 25 cents per pound and the price of the former commodity had frequently reached 50 cents. Even so, the supply had not equalled the demand. Here, then, was an opportunity for innumerable farmers to engage in a lucrative industry in an area with "the most profuse annual supply of nutritive grass." With such favorable natural factors coupled with the "extremely small . . . expense attending a dairy", the profits to be derived from this important department would be readily estimated.

The annual expenditure for pork and bacon im-

ported into the county equalled that for flour, Dr. Yeoman reported, and this too was a defect which could be remedied only by the settlement of a greater number of farmers interested in hog-production. "An ample supply of stock hogs should be immediately procured", he continued. With bacon quoted at 13 cents and ham and lard at 16 cents in Sioux City it seemed that this industry might well prove attractive. Sioux City was favorably "situated upon the bank of the snorting, belching, roaring and muddy Missouri" and had "one of the best landings on the river", an early settler wrote to the Charleston (Illinois) Ledger. It was on a transportation artery which would facilitate disposal of surplus products along the Missouri, characterized by the St. Louis Democrat as "the longest river in the world", as well as "the most peculiar".

Nor were the material attractions the only inducement for settlement in Woodbury County. Here the educational, religious, and social advantages were "certainly equal to those generally found in the early settlement of any country", according to Dr. Yeoman. There was "a school in operation within the reach of nearly every family in the county" and he found that the various denominations had "started preaching . . . in all the settlements within our borders." Indeed, ev-

ery community tended to become "a miniature republic, with a common centre for trade, consultation and the transaction of . . . business."

There was much work to be done in Woodbury County and in western Iowa in 1858. While merchants, mechanics, bankers, and even politicians were needed, the Sioux City Eagle reported that the crying need was for men to till the land. "With industry", it concluded, "as large fortunes can be upturned from its fertile soil as were ever dug from the golden soil of California." This was truly "a destined land".

THOMAS E. TWEITO

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