On Getting
From Here to There

While I was talking recently to the Director of our Scottish Rite Masonic Museum of Our National Heritage, he was telling me about some of the upcoming exhibits. What impressed me the most was the way the staff is working on exhibit plans at least two years in advance.

There is an important lesson here for all of us. It begins with setting a goal. The young man in business sets his sights on where he wants to be in five or ten years down the road.

But there is more to it than just having a goal. All of us know people who are always talking about what they were going to do. Time passes and they remain right where they were! They may have a goal but it really doesn't do them any good. Talk is substituted for action!

To get from here to there—to reach a goal—it is imperative to have a plan. How many times have you and I attended committee meetings where the enthusiasm ran high over the possibility of initiating a particular program or project. Every member of the group was ready to go to work. Then, at the next meeting, the chairman asks the members what they have accomplished. Everyone is embarrassed because little or nothing has been done.

The problem is generally a lack of a plan. As a friend of mine says at meetings, “Who is going to do what to whom?” This is good to remember if we are serious about getting things accomplished.

Several men I know are busy reaching one goal after another. Each one has a “To Do” list. They write down everything that must be done—and when. That’s their “plan.” It is a pleasure working with them because you know you can count on them to get the job done.

What helps a man reach a personal goal can be applied to Masonry as well. The Supreme Council asked our Valleys to help observe the first annual “Scottish Rite Masonic Family Life Week,” last November. It was not until August that suggestions on ways to plan this new observance were sent out. As a result, there was little time to go to work.

The immediate response was interesting. Within a few weeks, most Valleys had chosen chairmen for the event. Then, letters began to arrive indicating what the “Family Life Week” committees were going to be doing in November.

Several Governors were contacted in regard to issuing official proclamations. State legislatures and city council were asked to become part of the observance. Radio and TV stations became involved in making public service announcements. Plans were made for news stories. In many Valleys programs were arranged for the members of our Masonic families.

Even though the time was short, our leaders developed plans and organized their committees. As a result, the first “Scottish Rite Masonic Family Life Week” was a great success! They reached the goal—and we congratulate them for their efforts.

With proper planning, all of us can climb the highest mountain.

Stanley F. Maxwell, 33°
Sovereign Grand Commander
ON GETTING FROM HERE TO THERE
by Stanley F. Maxwell, 33°

With proper planning, all of us can climb the highest mountain.

THE VOICE OF OLD NORTH CHURCH
by Geoffrey Davies

The lantern in the belfry isn’t the only signal to come from that historic tower.

WHAT DO MUSEUMS COLLECT? AND WHY?

What a museum chooses to collect is the subject of a new exhibit at the Museum of Our National Heritage.

FAMILY CHANGE IS INEVITABLE
by William D. Brown, 32°

Adjusting and coping with changes which occur around us continually is a challenge of the first order.

ENDORPHINS: THE BRAIN’S OWN MORPHINE
by Jonathan Sugarman

Conclusion of a 10-part series on schizophrenia.

IN A NOOK WITH A BOOK
by Alphonse Cerza, 33°

A review of “Sources of Masonic Symbolism.”

MICHIGAN MASONS VISIT THE MOTHERLAND
by S. Josiah Penberthy, Jr., 33°

A Master of a Michigan lodge was raised in a British lodge and wanted to show the brethren “back home” how seriously he had taken to the craft.
The Voice of Old North Church

By GEOFFREY DAVIES

The famed lantern in the belfry of the Old North Church in Boston's North End isn't the only signal to come from that historic tower. One of its greatest treasures is its unique ring of bells.

This once proud voice resounding from the church steeple, however, has suffered many years of neglect. But now a major restoration project is in progress to preserve this unique voice for future generations.

A simple stone plaque on a rear wall of the church records the installation in the tower of the first ring of bells exported to North America. The eight bells were cast by Abel Rudhall at Gloucester, England, in 1744 and were installed a year later in a massive wooden frame, built to Rudhall's specifications in Philadelphia.

The cost of the work was raised by public subscription, and the names of the many donors, with each amount donated, were carefully recorded. About 1200 pounds sterling was needed, a considerable sum of money in those times. The fact that the installation was completed and paid for in this manner is testimony to our forebears' conviction that Old North Church needed a voice as much then as it does today.

These eight bells, which together form an outstanding 18th-century musical instrument, predate the Liberty Bell, originally cast in London in 1752. Despite their present-day obscurity, they have played a vital part in the history of our nation and are, in fact, a unique example of 18th-century craftsmanship which could never be replaced.

Paul Revere was 15 years old when he and seven friends signed a contract to "attend there once a week on evenings to ring the bells for two hours each time." The fittings had been designed to allow the bells to be rung full circle so that change ringing, a 17th-century art-form, could be practiced. The eight companions each learned to ring their individual bells full circle so that regular, musical sequences, such as 12345678 (called "rounds"), 13572468 (Queens), 12753468 (Whittington's), and 75312468 (Back Queens), became the voice of Old North Church.

This musical instrument could have produced the pleasant, cascading sound of well-struck changes only when its eight musicians worked in perfect unison. These ringers became very firm friends as a result of working so closely together. Unfortunately, no detailed record of this early Ringing Society exists, but perhaps the idea of hanging the lanterns in the tower on that fateful night in 1775 arose from Revere's ringing activities. He maintained a life-long love for bells and several notable examples of his own casting work have been preserved.

Abel Rudhall was a member of a Gloucester family that made its living by casting, tuning, and installing bells.
in England churches. For the most part, he was paid to replace bells in existing rings that had been cracked by misfortune or misuse. Then, as now, a bell was formed by pouring molten bell-metal, an alloy of copper and tin, into the space between a clay-and-horseshoe core and an outer shell (the cope), which together determine the finished bell’s dimensions.

An 18th-century English bell has a fundamental tone and four other tones, all of which must be precisely related if the bell is to ring “true.” Each newly-cast bell was allowed to cool for up to a week, then the mold was broken open and the bell’s tone was tested. It was generally necessary to chip pieces from the lip of the brittle new bell until it was not only “true” in itself but also in tune with its sisters in the complete ring.

One remarkable feature of the bells at Old North Church is that they bear no tuning marks. They apparently came out of their molds as a perfect musical instrument. Another is the fact that this is the only complete ring of bells by this one man, Abel Rudhall, which is known to exist.

The site of the Rudhall foundry in Bell Lane, Gloucester, is a landmark today, but the exact composition of bell-metal used and the craft employed in creating the bells of Old North Church has long since passed into obscurity. No modern technology could ever replace any one of the bells, which still sound the same today as they did on the day they were cast in 1744.

After Revere’s time the art of change ringing at Old North Church went into decline and, except for a brief resurgence around the turn of the present century, the bells have simply been “clocked” by striking their outsides with hammers while they are stationary with their mouths pointing down. It has long been known that the brittle character of early bells makes them much more likely to be cracked by “clocking” than by being struck by the clapper when they are moving in full circle. In the latter motion, the clapper flips from one inner side of the bell to the other as the bell is moving away from it. It is a miracle that these bells have survived centuries of mistaken “clocking.”

In 1894, Dr. Arthur Nicholls, a Boston philanthropist, was responsible for having the original bell frame and ringing fittings replaced so that the bells could be rung full circle again after many years of misuse and neglect. He found jobs in Boston for English ringers so that the intended purpose of the bells could once again be realized. Ringing continued in fits and starts for about 20 years, but again fell into decline because no new ringers were trained and eight were always needed to man the bells. So they lay idle for most of this century, and the true voice of Old North was almost lost.

The bells were rediscovered early in 1975, and a special course in change ringing was offered at the Massachusetts Institute of Technology to ensure that ringers would be trained in time for the bicentennial to be marked with the actual voice of the Revolution. Since then they have been rung regularly by the successors of these first students.

But many previous years of neglect have left the 1894 bell frame and fittings in a very sad state of repair. The necessary restoration work requires rehanging the bells in a new steel frame lower in the brick portion of the tower to give the installation much greater mechanical stability. The bells will all be provided with new headstocks, bearings, and ringing fittings. A new floor will be installed above the bells for two important reasons. First, it will protect them from falling tower debris and the elements which presently soak them. Second, by virtue of its trapdoors, it will provide much needed sound-control so that the art of change ringing can be learned without annoyance to the neighborhood. When the occasion arises, the trapdoors can be opened to give full voice to the bells.

This restoration work will be carried out by the Whitechapel Bell Foundry of London, the successors of Rudhall, at a projected cost of $100,000.

Just as the 18th-century records show the supporters of the original installation, so too a new commemorative plaque will be placed in the church as a perpetual record of contributors to the restoration of the bells.
What Do Museums Collect? And Why?

Some important pieces have been added to the Museum of Our National Heritage's growing American history collection and its specialized collection of American objects with Masonic decoration. What the museum chooses to collect and add to its permanent collection is the subject of a new exhibit “The Museum Collects: Recent Accessions,” which opened in February and continues through August 15.

Since its founding six years ago, the museum has acquired by gift or purchase, some exceptional and historically significant maps, paintings, prints, glassware, textiles, clocks, and furniture. A sampling representative of the most recent acquisitions is shown in “The Museum Collects.” For the most part, objects have been grouped together under subject headings to show the value of these objects for interpretive purposes in a museum setting. How people lived and worked in the last century, famous persons, and current events were documented by early American artists in paintings and prints. A rare map of New England, dated 1755, by Thomas Jefferys, is one of the earliest fairly accurate maps of the area and one of several maps on display.

Several areas of the exhibit show material associated with Masonic and other fraternal organizations. The museum actively seeks to collect and preserve important objects connected with Freemasonry in order to build a research collection for future scholars of Freemasonry and fraternal organizations in America. In the area, “The Spread of True Fraternity,” Masonic aprons, portraits, ceremonial jewels, and regalia may be seen along with many objects from the home that have Masonic decoration. Of special note is a mahogany sideboard, circa 1790, with inlay of Masonic square and compasses, a brass snuffbox dating from 1800 engraved with Masonic symbols, and a silver vinaigrette from the 18th century with pierced grillwork composed of Masonic designs. Some of the objects from other fraternal organizations that are on display are an Odd Fellows Quiver, a jewel of the Patrons of Husbandry, a Druid certificate, and an Odd Fellows portrait.

Decorative arts objects include a wide range of artifacts that have been used by Americans for both practical as well as decorative purposes. The museum studies how objects were made and what methods were used to
ornament and embellish them. The utilitarian functions these objects served are interpreted along with the broader social and symbolic meanings they can impart. Recent acquisitions in this area are a shelf clock (circa 1820) by Asa Munger of Auburn, New York, a tall clock by Silas Hoadley (circa 1815) from Connecticut, and several chairs, including a bentwood chair made by Samuel Gragg of Boston (1808–1830). Also on display are some pieces of centennial-era pattern glass and several pieces of pressed glass.

In addition to documents and manuscripts, the museum collects photographs as an important pictorial archive of American life in the 19th and 20th centuries. A small section of the exhibit is devoted to photography and features three carte-de-visites of Generals Burnside, Grant, and Custer (circa 1870).

The accompanying text for the exhibit explains why it is important for a museum to collect and preserve certain objects. It is because written documents alone cannot tell the complete story of everyday life in the past. These objects of material culture help to provide insights into the lives, events, values, and beliefs that together with written accounts form our nation's history.

A sampler of linen worked in silk by Mary Sandiford (1840).

A sideboard attributed to Thomas Burling, New York City, c.1790, with inlaid Masonic emblem.
Family Change Is Inevitable

By WILLIAM D. BROWN, 32°

Some 500 years before the time of Christ, Heraclitus wrote that nothing is permanent except change. This applies to our work, our fraternity, our social group, and certainly to our families. Learning to cope successfully with change is absolutely essential to sound mental health. In Masonry this means the difference between living but partially or being a whole person.

When the late Dr. Robert M. Hutchings was President of the University of Chicago, a visitor once inquired of him, “If your undergraduate students could leave this great institution of learning after four years with only one lesson imbedded in their minds, what would you choose this to be?”

Dr. Hutchings replied, “I’d teach them to cope with change, which is inevitable.”

Yet we frequently see change as the enemy, something to be avoided at best or negated at worst. However, change is amoral, with neither positive nor negative implications, per se. Some time ago while in a major city, I talked with an 80-year-old man who had lived there all his life. “You must have seen some real changes in this city in your lifetime,” I remarked.

“Still, and they haven’t all been bad,” he replied.

As change is neither bad nor good, it can serve man well or be a bane to his existence.

Who would opt for a return to times when less than 50% of the American public completed high school? Which of us wants a rerun of the days when females on college campuses were as rare as finding them in one of the professions? Changes in the medical field have not only prolonged life but have permitted loved ones to live free of pain where not long ago death would have been viewed by them and us as more merciful than life.

Upon the invention of the train someone remarked how wonderful, for now missionaries could fan out over this entire continent performing their good deeds. A realist remarked, “Yes, but this same change also provides thieves with increased opportunities for their misdeeds.”

Similarly, change has produced both desirable and undesirable results for the American family in recent decades which are of special interest to us as Masons, with our emphasis on the sanctity of the family.

True, we have a divorce rate that is far higher than any of us would like, but we also should note that this high divorce rate is accompanied by an extremely high remarriage rate among the divorced. Some comfort for the American family as an institution can be found in recognizing that an increasing number of the divorced opt for remarriage. Obviously family life is attractive, in fact so attractive that even among those who have had less than desirable previous experiences in establishing their own families, they choose to try again.

DR. WILLIAM D. BROWN, 32°, is a member of the Scottish Rite Valley of the District of Columbia. A clinical psychologist, he is also a syndicated columnist (Families Under Stress) who writes frequently for Masonic publications.
Another change affecting the family is noted with courts that are less reluctant to award custody of minor children to fathers. Increasingly, fathers are being given equal consideration with mothers before custody is awarded. This change is especially constructive where the father is the best qualified of the two parents to meet the child's needs. Granting custody to the male in the past was usually dismissed out of hand unless the mother was shown to be grossly unfit.

While there is still room for much improvement in most states, upon separating today the wife is treated better in legal settlements than in the past. This welcomed change by all fair-minded persons has resulted in more equitable post-marital settlements, removing a just cause of discontent for females treated unfairly in the past.

Another change that blows like a fresh wind over a parched desert is that of men and women no longer being burdened with the myth of the divine right of male dominance. This single change in the thinking of the masses has brought about equality in marital relationships which would have been unthinkable only 50 years ago. Now both sexes are freed to enjoy each other as equals, not restricted by the previous all too prevalent custom where one remained subservient in marriage while the other (usually the male) was expected to be knowledgeable and certain in all his decisions.

Today there is more emphasis on individual, not sexual differences. Surely there are significant sexual differences, but do said differences mean that only females should be nurses, with the practice of medicine restricted to males? Today all but the most provincial would argue that one's sex should not limit professional or vocational opportunities. This realization alone opens new horizons for both sexes, unleashing opportunities that previously didn't exist for either our sons or daughters.

Adjusting and coping with changes which occur around us continually is a challenge of the first order. No life is constant and taking up the battle against change is fruitless. Masonically we live at our best when we recognize the potential inherent in our intellects, which will enable us to cope more adequately with the inevitable change as it affects all spheres of life, more especially our families.

IN MEMORIAM
III.' George Edgar Gullen, Jr., 33°

III.' George E. Gullen, Jr., 33°, the Grand Lieutenant Commander of the Supreme Council and Deputy for the state of Michigan, died on January 8 at the age of 67 after a long illness.

A graduate of Wayne State University, III.' Brother Gullen was employed for 20 years as director of industrial relations at Detroit Controls Corporation before joining American Motors Corporation in 1955 as director of labor relations. In 1962, he became director of industrial relations. He was named vice president for university relations at his alma mater, Wayne State University, in 1966 and was elected president in 1972.

Within the framework of a very busy career, III.' Brother Gullen found time for Freemasonry which greatly benefited from his broad experience in the business and academic fields. He was raised a Master Mason in Northwestern Lodge No. 529, Detroit, in 1945, and received the Scottish Rite degrees in the Valley of Detroit the following year. He was also a member of the York Rite bodies in Detroit.

For the Scottish Rite Valley of Detroit he served as Thrice Potent Master in 1964 and Commander-in-chief in 1968. He received the 33° in 1965 and was crowned an Active Member of the Supreme Council in 1974. He had served on a number of Supreme Council Committees and had been Grand Lieutenant Commander and Deputy for Michigan since 1979.

In 1957, he married the former Mary Ruth Gullen, who survives him along with eight children.
Endorphins: The Brain’s Own Morphone

By JONATHAN SUGARMAN

It is ironic that morphine, a drug which has assuaged the physical pain of suffering patients for nearly 200 years, is the parent compound from which heroin, the source of so much social anguish in the recent past, is derived. Because of the undesirable addictive properties which accompany their painkilling activity, narcotic drugs have been the focus of prolific research in the last several decades.

It is equally ironic that much of this research, which was never conceived with an eye toward the understanding of mental illness, has taken a tortuous path leading directly to the core of the most exciting contemporary work in schizophrenia.

Characteristically, investigators supported by the Scottish Rite schizophrenia research program have forged important links in the chain of understanding leading from morphine to madness.

Although the opium plant’s medicinal properties have been exploited by various cultures for thousands of years, it was not until 1806 that a German pharmacist named Friederich Serturner extracted a pure chemical substance from the poppy. Because of its capacity to induce drowsiness, he christened the compound morphine (after Morpheus, the Greek god of dreams).

After several similar drugs (such as codeine) were isolated from the opium poppy, medicinal chemists embarked upon an industrious, and frequently fruitful expedition to develop drugs which shared morphine’s desirable attributes. Unfortunately, an undesirable characteristic of narcotic drugs which has been difficult to dissociate from the analgesic (painkilling) effects is their ability to interfere with breathing. This “respiratory depression” is a serious challenge to physicians, for it represents a potentially fatal consequence of overdose.

Although scientists recognized as early as 1915 that a chemical relative of morphine could counteract its deleterious effect on breathing, it was not until the 1930’s that similar compounds were used by doctors in the treatment of narcotic overdose. These new antinarcotic drugs were called opiate antagonists. (Likewise, chemicals which act similarly to morphine are known as opiate agonists.) The opiate drugs have been used successfully not only for analgesia but also for cough suppression, treatment of diarrhea, and other conditions. Today opiates which vary in potency from many thousand times more powerful than morphine to 1/6 its strength are available to physicians and researchers.

The existence of many structurally related drugs sharing similar activity and the presence of specific antagonists to those actions rings a bell in the minds of pharmacologists. The implication drawn by these scientists is that a receptor for the substances exists somewhere in the body. A receptor for a brain chemical is frequently likened to a lock which can only be opened by an appropriately shaped key. When a chemical for which a receptor exists is released from a brain cell, it acts as a key which will only fit into one distinctive keyhole on another cell. In the brain, the keyhole is actually a chemical receptor site whose occupation by the proper substance (a neurotransmitter) produces a unique signal to the cell of which it is a constituent. Because most of the brain’s 10 billion cells are capable of releasing at least one of the dozens of known or suspected neurotransmitters, the advantages of receptors which aren’t triggerable by any chemical which just happens to be in the neighborhood are substantial. With a sensitive and specific neurotransmitter-receptor system, the extraordinarily complex communications system in the brain becomes somewhat more manageable.

Although scientists have long had the intuition that opiate receptors are present in the brain, it was an uphill struggle to actually prove that they exist. Finally, in 1973 three groups of investigators simultaneously and independently documented the existence of brain opiate receptors. One of those groups consisted of Candace Pert, a recipient of a Scottish Rite Dissertation Research Fellowship, and her advisor Dr. Solomon Snyder, a Scottish Rite supported researcher at Johns Hopkins University.

Using specially prepared radioactive opiates and opiate antagonists, Pert and Snyder were able to demonstrate the existence of binding sites for morphine and similar drugs in various areas of the rat brain. Drugs that block the effects of opiates also prevented the binding of opiates to the newly discovered receptors.

Several other provocative discoveries were made. Many active chemical compounds have mirror image compounds which are biologically inactive. It is as
Twenty years ago, few would have guessed that a natural morphine might exist in the human brain and that it might be related to matters as diverse as schizophrenia.

though a receptor site is a left shoe which will only accommodate a left foot. Although an identical (or, actually, a mirror image) right foot exists, it won’t fit correctly into a left shoe. The Scottish Rite investigators found that the drug-binding sites were so specific that mirror image (right foot) drugs would not fit into the receptors (left shoes).

Pert and Snyder also showed that the ability of a drug to produce analgesia in humans is roughly proportional to the avidity with which it will cling to the newly discovered opiate receptors. Furthermore, those areas of the brain which are most closely associated with the sensation of pain had the highest concentrations of the receptors.

In an earlier article (see The Northern Light, September 1981), receptors for such neurotransmitters as dopamine were discussed. Morphine, however, had never been identified as a component of the human body. Why should a keyhole exist for a key which is not also present in the system? Does the body have its own innate painkiller? Spurred on by this apparent paradox, several groups of investigators from California to Scotland to Scandinavia entered a competitive race to identify an “endogenous morphine.”

In 1975, such a substance was first isolated by Dr. John Hughes, a scientist from Aberdeen, Scotland. After extracting the chemical from brains, he demonstrated that it had many of the properties of morphine when applied to preparations of animal tissue. He was able to characterize two such chemicals as small proteins, or peptides. The peptides were found to consist of five amino acids (the chemical building blocks of proteins), and were then artificially synthesized by Hughes. He named the compounds “enkephalins.”

Shortly afterward, other researchers found slightly larger proteins which had opiate-like characteristics. These chemicals were called “endorphins,” a contraction of “endogenous morphine.” It was subsequently discovered that the enkephalins were actually small portions of the larger endorphin molecules.

The discovery of the endorphins and enkephalins represents something of a scientific tour-de-force. The ultimate success of the search for these substances resulted from thousands of hours of painstaking work requiring considerable persistence as well as ingenuity.

In order for Dr. Roger Guillemin of the Salk Institute in La Jolla, Calif., to identify several endorphins, he had to examine about a quarter of a million sheep hypothalamuses (a small area of the brain). Lest this seem an impossible number, consider that several years previously he examined five million fragments of sheep brain in order to isolate a specific brain hormone. After processing five tons of brain tissue, he was able to extract about one milligram (approximately 1/30,000 of an ounce) of the precious substance!

It may seem as though the identification of endorphins and enkephalins is somewhat far afield from the problems of schizophrenia. However, over the past few years, clues have converged from various types of research that the endorphins may be involved in several psychological processes.

One of the first of these clues was reported by Dr. Floyd Bloom of California’s Salk Institute in 1976. Bloom and his associates injected minute amounts of an endorphin into the brains of rats and observed the rats’ behavior. They ceased to move around normally and, in fact, became rigidly immobile.

A similar phenomenon, called catatonia, occasionally occurs in schizophrenic patients. Thus, a new hypothesis began to take shape: Do schizophrenics have increased levels of endorphins, or perhaps abnormal endorphins?

In order to test this hypothesis, psychiatrists at several institutions decided Continued on next page
ENDORPHINS
Continued from previous page

to take advantage of the narcotic antagonists, which are known to block some of the effects of endorphins in animals and in normal human beings.

A group at Stanford University School of Medicine led by Dr. Jack Barchas, a former member of the professional advisory committee to the Scottish Rite schizophrenia research program, and Dr. Stanley Watson, a Scottish Rite grantee now at the University of Michigan, used this strategy in an attempt to treat schizophrenic patients. After screening over 1,000 schizophrenic patients, they identified 11 people who suffered from persistent auditory hallucinations (hearing of nonexistent voices). The Stanford group administered the drug Naloxone or an inactive but identical-appearing placebo to these patients and monitored the level of the hallucinations. Over half the patients showed some improvement after receiving the opiate antagonist. Unfortunately, the results of the experiment do not unequivocally prove that Naloxone will be useful in the therapy of schizophrenia.

Other investigators have been unable to demonstrate any beneficial effects attributable to Naloxone and similar drugs in treating mental illness. Nevertheless, intensive research regarding the usefulness of opiate antagonists is underway in many centers.

A chance observation made by a kidney specialist from the University of Florida has produced another possible clue to the puzzle of schizophrenia. Dr. Robert Cade was treating a patient with renal dialysis, a procedure in which blood is removed from the body, treated, and replaced when the toxins which have accumulated due to kidney disease have been filtered out. Dr. Cade's patient happened to be a schizophrenic, and he noticed that her mental symptoms abated after repeated dialysis. Cade and Dr. Herbert Wagemaker, a psychiatrist from Louisville, Ky., studied the effects of dialysis on six schizophrenics. They reported that five of the six lost their schizophrenic symptoms, and that the sixth improved substantially.

In view of the dozens of treatments initially thought to be useful for schizophrenia which later proved to be ineffective, many members of the psychiatric community have taken a somewhat skeptical position concerning these findings. However, several studies investigating the place of dialysis in schizophrenia are now in progress. An interesting aspect of these studies concerns the dialysate, or solution in which the toxins are collected during dialysis. It has been reported that the dialysate from schizophrenic subjects contained a type of endorphin which was not previously found in human beings. This finding suggests that schizophrenics may have abnormal brain peptides which are somehow related to their behavioral difficulties.

Whenever a new abnormal substance has been alleged to be found in schizophrenia, an initial flurry of enthusiasm has always been followed by the disappointment when it is found that it is really not peculiar to schizophrenia at all. The next several years will undoubtedly see a thorough evaluation of these fascinating findings.

Readers who have followed the previous articles in this series may be wondering how the newly discovered enkephalins and endorphins are related to dopamine, the neurotransmitter which has been implicated in recent theories regarding the biochemical basis of schizophrenia. Since the discovery of the endogenous opiates, it has become evident that there is some overlap between dopamine and enkephalin physiology in the brain. Although the exact relationships are not yet clear, it appears that brain opiates may somehow modulate the activity of dopamine containing neurons, or vice versa. Scottish Rite investigator Dr. Stanley Watson and his colleagues have suggested that if the endogenous opiates and dopamine exert independent effects on schizophrenia, pharmacological manipulation of the endorphine systems may help those patients who are not responsive to today's drugs, which are thought to act primarily via dopamine receptors.

It is gratifying to see that much of the research regarding the endorphins has already yielded fascinating results in other fields. For instance, several experiments suggest that acupuncture, the ancient Chinese art of killing pain by inserting needles into various parts of the body, may work by stimulating the release of endorphins. Even more mysteriously, placebo pills (such as sugar pills with no medication added) seem to cause increased levels of endorphins when they are given to patients in pain. Doctors have long realized that placebos actually do seem to attenuate pain in some people, and the enkephalins may somehow be involved in this intriguing phenomenon.

Twenty years ago, few would have guessed that a natural morphine might exist in the human brain and that it might be related to matters as diverse as acupuncture, placebo drugs, and schizophrenia. Yet due to tedious and industrious scientific work, these ideas are now commonplace. In this series on schizophrenia, we have examined many aspects of medical science and psychol- ogy which have importance in the understanding of schizophrenia. Genetics, family relationships, brain biochemistry, attentional mechanisms—all seem to play a part in this complex, severely-disabling disorder which afflicts millions of Americans. While some of the crucial discoveries have been serendipitous, most have resulted from carefully planned programs of research which each sought to add at least a small insight into the perplexing enigma of schizophrenia.

Over 30 years ago, Dr. R.G. Hoskins, a neuroendocrinologist from Harvard Medical School, eloquently outlined the challenge confronting those concerned with the problem of schizophrenia. It is a challenge that the Scottish Rite Masons have generously met, resulting in significant strides forward. Only through continued support, however, will the great emotional crippler be adequately understood and thereby controlled.

The final and heaviest responsibility lies, of course, upon society itself. The law of supply and demand is operative in this as in all other fields of human endeavor. Society will get approximately what it demands and is willing to pay for. Up to the present time only a fraction of a percent of the total funds devoted to medical research has been assigned to this, the greatest problem of all. While money alone will not solve the problem, none of the actual solutions are possible without it.

The problem is before us. Many promising leads for further research are obvious. Every baby born this year must take his chance of spending the best years of his life as a schizophrenic in a mental hospital. Society owes him a better defense.*

IN A NOOK WITH A BOOK

'Sources of Masonic Symbolism'

Reviewed by ALPHONSE CERZA, 33°

Sources of Masonic Symbolism by Alex Horne, 33°. Published in 1981 by the Missouri Lodge of Research, P.O. Box 480, Fulton, Mo. 65251. 83 pp. $8.

Since the extensive use of symbolism is the characteristic that distinguishes Freemasonry from other organizations, a great deal has been written about the part which symbols play in the craft and their interpretation. But this is the first time that the origin of Masonic symbols has been explored in depth in both Masonic and non-Masonic material. The result is an interesting and informative book which collects in one place all pertinent existing material on the subject.

This book explains the differences between a symbol and an emblem and why the distinction must be kept in mind to avoid being misled. The difficulty encountered in the search is briefly discussed, and there is a general consideration of the subject of Masonic symbolism. There is a detailed explanation of the importance of the 1507 square which was discovered in the foundation of Baal's Bridge when it was being demolished in November, 1830, at Limerick, Ireland. This square had the following words engraved on it: "I will strive to live with love & care, upon the level, by the square." Clearly, here is an early object used as a symbol to do some moralizing. It is this element which the author was seeking in his quest. Significantly, the square is being used to this day in Freemasonry as a symbol with a moral lesson.

The elusive existence of the sources of Masonic symbolism led the author to the Holy Bible, to material in the ancient world, and to various kinds of literature. The Old Charges of Freemasonry are given special attention especially in connection with the operative masons' working tools, which were carried forward into the symbolic craft. Many specific Masonic symbols are considered, such as the square, the seven liberal arts and sciences, the rite of cirumambulation, cornerstone-laying ceremonies, the northeast corner, architectural items, and the symbolism of King Solomon's Temple.

III'. Brother Horne, the author of this fine book, has been a member of the craft for over 50 years and has been a devoted student of Freemasonry for many years. He brought to this research project years of experience as a Masonic researcher. The result is an excellent book that can be read with interest and profit and will result in a greater appreciation of the nature of symbolism in the craft. The many footnotes and the bibliography will serve as useful tools for the Masonic student who wishes to pursue the subject further.

OTHER MASONIC BOOKS OF INTEREST

Freemasonry's Great Words to Live By by Dwight L. Smith, 33°. Thought-provoking essays. Available at $7.50 a copy from Research Lodge No. 2, Donald Pady, Secretary, 212 No. Riverside Ave., Iowa City 50010.

Masonic Parallels With History. This is a chronology of general history and Masonic History presented in adjoining columns giving a good bird's eye view of history. Available at $2.25 a copy from the Masonic Service Association, 8120 Fenton St., Silver Springs, Md. 20910.

Transactions of The Maine Lodge of Research. Volume 2, covering the papers presented in 1980-81, it has many papers of general interest on Masonic subjects. Available at $4 a copy, from C. Weston Dashi, Shore Road, Medomak, Maine 04551.

Conrad Hahn, Connecticut Freemason. A glowing tribute to an outstanding Mason with a reproduction of a number of his talks. Available at $7.50 a copy from the Philosophical Lodge of Research, 31 Woodland St., Apt. 11-S, Hartford, Conn. 06105.

A Modern Mason Examines His Craft by Dr. L. C. Helms. A thought-provoking series of essays considering many aspects of the craft today with suggestions for planning for the future. Available at $6.50 a copy from Macy Publishing and Masonic Supply Company, P.O. Box 9759, Richmond, Va. 23228.

King Solomon's Temple in the Masonic Tradition by Alex Horne. $5 for soft cover or $20 for cloth cover, plus $1.50 shipping and handling. Available from Macy Publishing Company, P.O. Box 9759, Richmond, Va. 22228.
Michigan Masons Visit the Motherland

By S. Josiah Penberthy, Jr., 33°

Shortly after Kenneth Bolton was raised in New Era Lodge No. 5991 in Gravesend, Kent, England, he left his native land for industrial Michigan, more particularly, the historic city of Rochester just a few miles north of Detroit. Once settled, he became affiliated with Rochester Lodge No. 5, F & AM, and immediately began his progress through the chairs.

He had an idea that he would like to make a sojourn back to his mother lodge in England with a group from Rochester Lodge when he became Worshipful Master. He wanted to show the brothers back home how seriously he had taken to the craft.

By the time he occupied the chair in the West, plans were beginning to take shape. He had contacted Tom Pape, 32°, a travel agent from across the Detroit River in Windsor, Ontario, and Oriental Guide of Mocha Shrine Temple in London, Ontario. Brother Pape was asked to work out a tour package while Ken worked out the Masonic details.

Brother Bolton, a member of the Scottish Rite Valley of Detroit, has a fertile mind. In addition to the planned trip to England, he had begun another project—that of reversing a lodge name-change which had taken place 120 years ago! One of the most historic lodges in the midwest was “Stoney Creek Lodge No. 5” in Michigan whose name was changed to “Rochester Lodge No. 5” in 1860. (See The Northern Light, January 1975.) Because of the great historical significance of the name “Stoney Creek,” Ken felt his lodge should again assume the original name and took steps to do just that! In May, the name change was approved and just one week before the departure of the group of Michigan Masons for England, the entire Grand Lodge line of officers came to “Stoney Creek Lodge No. 5” for the reconstitution of the lodge. Quite an event—to precede “quite an event.”
The original idea of a visitation to England germinated, grew, and blossomed from a mere visitation by Stoney Creek Lodge to an official visitation by the Grand Lodge of Michigan! A delegation of some 70 Michigan Masons and their ladies headed by M.W. Carl C. Worfel, 33rd, Grand Master of Masons in Michigan, and Acting Scottish Rite Deputy for Michigan.

It was the plan to exemplify the Master Mason Degree, according to Michigan ritual, for the members of New Era Lodge in Gravesend, but as often happens, this plan, too, snowballed.

Three degree teams were organized and the Michigan work was exemplified for the Grand Lodge of England through Jubilee Masters Lodge in London, at New Era Lodge No. 5991 in Gravesend, and at Francis Drake of Yorke Lodge No. 7825 in York, England.

At Masonic Hall on Great Queen Street in London, we were given a "royal greeting" by The Honorable Edward L. Baillieu, Assistant Grand Master of England, who was accompanied by the Grand Secretary and other Provincial Grand Masters. The work was exemplified before some 700 English brethren, 500 of whom remained for dinner and the "festive board" celebrated in the temple's huge dining room.

Following some presentations, the Grand Master of Michigan extended an invitation to the English brethren to visit the Michigan Grand Lodge at its meeting in May at Grand Rapids.

Following the London Grand Lodge experience, the group moved on to Gravesend where once again degree work was exemplified before a capacity crowd. Brother Bolton attended the East "masterfully" in both London and Gravesend, and his hometown brethren expressed their pleasure by honoring him for his Masonic accomplishments.

In the morning we were off for the north of England and the historic city of York, where Masonry had its beginnings 1000 years ago. We had long ago donned our badges as "tourists" and visited places such as Chartwell, Cambridge, the Town of London, Stonehenge, Bath, Windsor, and other attractions, so we were not always found with our noses in the ritual books. The ancient city of York greeted us as the late afternoon rays of the sun reflected from the twin towers of York Minster which stood as a sentinel over the city as it has for more than 700 years.

At Francis Drake of Yorke Lodge, this writer had the pleasure of attending the East during the degree exemplification. The American delegation was welcomed by the Very Worshipful Deputy Provincial Grand Master, Brigadier Claude C. Fairweather, 33rd, Scottish Rite Inspector General for Yorkshire North and East Ridings, and Arthur Elliot, Master of Francis Drake of Yorke Lodge. Once again we enjoyed the festive board with various toasts. Each toast, of course, had a response along with a "firing" ritual alluding to a 21-gun salute, all of which made for an exciting and enjoyable experience.

It now becomes the responsibility of the Grand Lodge of Michigan to muster a comparable "royal welcome" here in "the colonies" such as was demonstrated in "the land of our roots."

Some 500 English brethren from various parts of the country gathered for dinner and a "festive board" to greet Michigan Masons at Masonic Hall in London.

Kenneth Bolton, 32nd, Worshipful Master of Stoney Creek Lodge No. 5, Rochester, Michigan, who conceived the visitation to England, was honored with his wife Ann at the medieval feast.
Matching Gifts Can Make Your Contribution Mean More

Across the nation, thousands of businesses—large and small—are responding to the idea of matching charitable donations made by their employees. A number of Scottish Rite members have doubled and tripled their gifts to Supreme Council Charities by discovering that their employers had “matching-gift” programs.

Many national firms match employees’ contributions to schools and colleges. Now, most of these same corporations have broadened their giving to include research and cultural institutions. This is how the three Supreme Council Charities are benefiting from matching gifts.

Over the past several years, the Scottish Rite Schizophrenia research program, the Scottish Rite Masonic Museum of Our National Heritage, and the Abbot Scholarships in journalism and international affairs have received matching-gift donations.

Sovereign Grand Commander Stanley F. Maxwell, 33°, urges members to talk to employers about company matching-gift programs. “We are always pleased to provide information to businesses about Supreme Council Charities.”

The Grand Commander also suggests that Scottish Rite Masons who own their own businesses might consider establishing “matching gift” programs.

Nationally, over 800 companies have been identified as having this type of program. It is estimated that there are hundreds more also participating.

More recently, many of these programs have been expanded to include capital gifts and memorial contributions as well as contributions made by members of an employee’s family.

President Ronald Reagan has asked the nation’s business community to expand its support of charitable organizations. As a result, there appears to be a growing interest among many firms.

If your company has a matching-gift program, request that a verification form be sent to the Supreme Council so your gift to the annual “Blue Envelope” Appeal can be matched.

Perhaps you are not sure whether or not your employer has a “matching gifts” program. Now is the time to check it out.

Since 1954, over $149 million has been provided to our country’s schools and colleges through matching gifts. Now the opportunity exists for a wider variety of charitable institutions to benefit from corporate donations.

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**Strike A Match**

Your ‘Blue Envelope’ gift to Supreme Council Charities may double!

Many companies are now “matching” employee contributions to charities. Check with your employer. You may be able to “strike a match” for the Scottish Rite Supreme Council Charities.

- Scottish Rite Masonic Museum of Our National Heritage
- Scottish Rite Schizophrenia Research Program
- Scottish Rite Abbott Scholarships in Journalism and International Relations

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**IM PRINT**

11 THE NORTHERN LIGHT/APRIL 1982
Many businesses and national corporations have long had a policy of matching the contributions of their employees to schools and colleges. In recent years, company policies have been broadened to include other types of charitable gifts including cultural organizations. Supreme Council Charities have received matched gifts to the Benevolent Foundation and the Museum and Library. Here is a partial list of firms that make matching gifts to nonprofit charitable organizations. It is possible that other businesses have similar policies, although their names are not listed here. Please check with your company to see if it has a matching gift policy. You may be able to double your "Blue Envelope" gift to Supreme Council Charities this year.

A
Abbott Laboratories
Alico Standard Foundation
Allied Chemical Corp.
American Express Co.
American National Bank and Trust Co.
American National Foundation
Amerco, Inc.
The Andersons
Automatic Data Processing

B
The J. E. Baker Company
Bank of America
Barnes & Roche, Inc.
Bernd Brecher & Assoc., Inc.
Boeing Co.
Brunswick Corp.
Bucyrus-Erie Co.
Buffalo Color Corp.
Bunge Corporation
Burroughs Wellcome Co.

C
Campbell Soup Co.
Caterpillar Tractor Co.
Celanese Corp.
The Charter Company
Chemical Bank
Chubb & Son, Inc.
Citcorp & Citibank, N.A.
Connecticut General Insurance Corp.
Consolidated Foods Corp.
Continental Illinois National Bank & Trust Co.
Frederic W. Cook & Co., Inc.
Cooper Industries, Inc.
Corning Glass Works
CPC International Corp.

D
Dart Industries, Inc.

DEKALB AgResearch Foundation
Deluxe Check Printers, Inc.
Digital Equipment Corp.
Dow Chemical USA

E
Emhart Corp.
Ensign-Bickford Foundation
Equitable Life Assurance Society of the U.S.
Esmark, Inc.

F
Fiduciary Trust Co.
Freepoint Minerals Co.

G
Frank E. Gannett Newspaper Foundation, Inc.
Gary Energy Corp./Samuel Gary Oil Producer/The Piton Foundation
GenRad, Inc.
Gilman Paper Co.
GK & Western Industries, Inc.
Gulf Oil Corp.

H
Harris Trust and Savings Bank
Harsco Corp.
Hoffman-LaRoche, Inc.
Houston Natural Gas Corp.

I
Illinois Bell Telephone
International Minerals & Chemical Corp.

J
Jewel Cos., Inc.

K
Kimberly-Clark Corp.
Kopper Co.

L
Lever Brothers
Little, Brown & Co.

M
Marmorn Group Inc.
McCormick & Co., Inc.
McDonald's Corp.
McGraw-Hill, Inc.
Meadville Corp.
Merk & Co., Inc.
Mobil Oil Corp.
Montgomery Ward Foundation
Morgan Guaranty Trust Co. of NY
MTS Systems Corp.
Murphy Oil Corp.

N
National Distillers and Chemical Corp.
Northern Natural Gas Co.
The Northern Trust Co.

P
Pfizer, Inc.
Phillip Morris
Pillsbury Co.
Polaroid Corp.
PPG Industries, Inc.
PQ Corporation

Q
Quaker Oats Co.

R
Arthur D. Raybin Assoc., Inc.
Rexnord Inc.
Riegel Textile Corp.
Arthur Rudick Brokerage
RYCO Inc.

S
Schering-Plough Corp.
Joseph E. Seagram & Sons, Inc.
The Signal Companies Inc.
The SmithKline Foundation
Squibb Corp.
Standard Oil Company of Ohio
The Stanley Works

T
Tandy Corp.
Tektronix, Inc.
Texaco
Texas Eastern Corp.
Texas Instruments, Inc.
Tektron, Inc.
Time, Inc.
The Times Mirror Co.
The Toro Co.
Transamerica Corp.
The Traveler's Insurance Co.

U
Union Oil Co. of California
Union Pacific Corp.
United Life and Accident Insurance Co.
United Parcel Service
United Technologies Corp.
United Virginia Bankshares, Inc.

V
Valley National Bank of Arizona

W
The Washington Post
Wellington Mgmt. Co.
Winn Dixie Stores, Inc.

X
Xerox Corp.

Y
Yarway Corp.
Following the annual meeting of the George Washington Masonic National Memorial in February, members of the memorial's executive committee met with President Ronald Reagan at the White House. During the course of the visit a replica of the Washington statue at the Museum of Our National Heritage was presented to the President.

Masonry Celebrates George Washington's 250th

Special programs in honor of Washington's 250th birthday have been plentiful throughout the Jurisdiction. Many Valleys have named reunion classes for Washington.

The Valley of Pittsburgh presented a Betsy Ross flag to be flown at the Masonic Temple.

The Valley of Pittsburgh presented a Betsy Ross flag to be flown at the Masonic Temple.

The 10 Valleys in Massachusetts gathered at Worcester in March for a special program in honor of George Washington. The finale was a presentation of the 20°, witnessed by some 3,000 Scottish Rite members including a class of more than 950 candidates.

At the February reunion in the Valley of Grand Rapids, Mich., each candidate and sponsor was presented with a unique paper weight coin commemorating the 250th anniversary of the birth of our late President. Cast in pewter, the two-inch coin was made for the Valley by the Vallee Corporation of Saugatuck, Mich.

An additional supply of the memento has been cast and can be ordered for $7.50 (including shipping and handling) directly from Vallee Studio, Pewter memento, 63rd Street, Saugatuck, Mich. 49453.

Two lodges in Portsmouth, N.H., joined forces for a Washington tribute by presenting the Master Mason degree in colonial costume. The idea originated with Arthur G. Weeks, Jr., 32°, Master of St. Andrew's Lodge No. 56, and together with the officers of St. John's Lodge No. 1, the program took shape. In his opening remarks, Brother Weeks gave an address on "Washington, the Mason and Patriot."

Each officer participating in the degree work represented a Revolutionary War patriot who received his Masonic degrees in or became a member of St. John's Lodge No. 1—the only Portsmouth lodge then in existence. The candidate, John M. Dunbar, impersonated Col. Nathan Hale. Music for the evening included some representatives from the fife and drum corps of Aleppo Shrine Temple.

The event, which attracted an overflow crowd, was similar to a program presented in Portsmouth 50 years ago. Incidentally, there were seven members present who had also witnessed the 1932 program.

Notice to all holders of Visa and/or Master Charge cards with Peoples Bank & Trust Co., Wilmington, Delaware:

Pursuant to our agreement with the bank of several years standing, the bank will discontinue payments to our Museum & Library operating fund as of June 1, 1982.

You may, of course, retain your cards until they expire and then new cards will be issued, but without reference to the Museum of Our National Heritage.

Ill.: Stanley F. Maxwell, 33°
Sovereign Grand Commander
Footnotes

*First day covers.* To commemorate the 250th birthday of George Washington, a set of five Masonic first day covers were issued in February. The cachet series was designed by John R. Allen, vice-president of the George Washington Masonic Stamp Club.

The various covers in the set are sponsored by the Supreme Council (N.M.I.), the Grand Encampment of Knight Templar, the Washington Masonic National Memorial, and Louisiana Lodge No. 102, New Orleans. On the covers are reproductions of two Allyn Cox murals at the national memorial and a photo of a Houdon bust of Washington. Also reproduced is a design of Washington's "Home Life" considered for issuance as a stamp in 1932. The design was rejected and has never become a postage stamp.

Proceeds from sales of these sets benefit Masonic charities or building funds, including the Scottish Rite Masonic Museum of Our National Heritage.

The set of five envelopes may be ordered for $9.50 from J.R. Allen, P.O. Box 26135, Richmond, Va. 23260. A sixth envelope with a special Masonic Memorial postmark is available for an additional $1.50 when ordered with the set, or $2 when ordered individually.

*World's Fair.* If you're planning to attend the 1982 World's Fair at Knoxville, Tenn., this summer, you may want to take in a special Masonic display. The sponsoring agent will be the Grand Lodge of Tennessee, with joint sponsorship being shared by the Grand York Rite bodies, the Scottish Rite, and the Shrine.

The exhibit will be displayed in the Scottish Rite Temple, where special degree work, an educational film, and other appropriate events are being scheduled. The Temple, at 612 16th Street, is conveniently located only four blocks from the Fair area.

Included in the display will be an outstanding first day cover Masonic stamp collection, owned by the Knoxville Scottish Rite Valley. Also being prepared is a "Masonic tree" display, showing the many Masonic bodies and their relation to the blue lodge.

*More philately.* From the Netherlands comes word that a Masonic Studygroup is issuing a special cover for the 200th anniversary of the Dutch Lodge, "De Friesche Trouw" No. 20 E., of Leeuwarden. The cover is available for $1.50 per cover or eight for $10. Orders should be addressed to Brother M.A.C. Beekman, 101 Waalstraat, 1079 DS Amsterdam, Netherlands. No personal checks can be accepted. Payment should be made by international money order.

*Salem fire.* A multiple alarm fire at the Salem, Mass., Masonic Temple in February completely destroyed the floors used for Masonic purposes. Among the many Masonic bodies displaced was the Scottish Rite Valley of Salem. Having lost all regalia, stage equipment, and other items, the presiding officers are now busy attempting to put things together for a series of degrees in May. Temporarily the Valley will meet in neighboring Marblehead.

The city of Salem had been plagued by a series of fires in the preceding weeks. In fact, the Masonic Temple fire was discovered while firefighters were busy battling a blaze at the National Guard Armory several blocks away.

*Three generations.* When Grand Rapids (Mich.) Chapter, Order of DeMolay, named a class recently in honor of M.: W.: Carl C. Worfel, Grand Master of Masons in Michigan, the guest of honor was particularly pleased to find his grandson, Marc Vicari, among the class of candidates.

Ill.: Brother Worfel, who is also the acting Scottish Rite Deputy for Michigan, had joined Grand Rapids Chapter in 1939. Marc's uncle, Roger Worfel, became a member of the same chapter in 1955.

The fact that the grandson was to be a member of the class was kept secret from the Grand Master until the boy entered the chapter room.

*FDR honored.* Perhaps overshadowed by the anniversary celebration of Washington was the 100th anniversary of the birth of another Masonic President, Franklin D. Roosevelt. Nevertheless, Emil B. Fleischaker, 32°, a member of the Valley of Boston, included a Masonic tribute to the late President in an observance at the Charlestown Navy Yard that brought together speakers from various associations and institutions that were a part of FDR's life.

Brother Roosevelt was raised in Holland Lodge No. 8, New York City in 1911 and received the Scottish Rite degrees at the Valley of Albany in 1929, while governor of New York. While President-elect in 1933, he witnessed the raising of his son Elliott in Architect Lodge No. 519, New York City. Two years later he was present to witness the raising of sons James and Franklin D., Jr.

Richard H. Curtis, 33°
Editor
Attracting attention at the Scottish Rite Masonic Museum of Our National Heritage is the exhibit “G. Washington: American Superhero,” featuring a wealth of portraits, prints, folk art, memorabilia, and several participatory display areas for visitors of all ages. The exhibit will remain through October 31.