

View of the central part of St. Louis, 1855, from a drawing in the Missouri Historical Society. 1. Pacific Railroad, 2. Chouteau Pond, 3. Medical Department of Kemper College, 4. Missouri Medical College, 5. St. Louis Medical College, 6. Court House, 7. Catholic Cathedral, 8. Sister's Hospital.

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Early Years of the Missouri Medical
College

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The pioneer medical college of that vast region west of the Mississippi, with St. Louis as its metropolis, was the Medical Department of Kemper College, later known as the Missouri Medical College. The origin and founding of the school in 1840 by Drs. Joseph N. McDowell, John S. Moore and others have recently been described by Dr. Robert J. Terry.¹

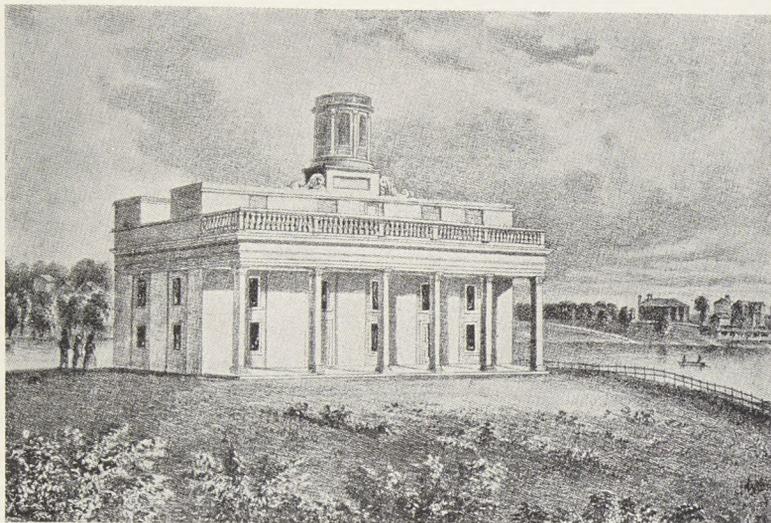
We should pause to picture St. Louis during the years following the founding of the school. In the early forties one might still have seen Indians camped at the edge of town, perhaps by Chouteau Pond or demonstrating their marksmanship to the crowds in the street.² In 1845 trading with the Indians was prohibited and in the same year the first string orchestra, the Polyhymnia, was organized. Trade with Mexico over the Santa Fe Trail was flourishing and immigration to the West was active, even to the far west over the Oregon Trail. In 1846 the City Hospital was opened. In the spring of 1847 several patients were operated on under ether anaesthesia.³ During the same year the Mercantile Library was founded and the first telegraph line to the East completed. In 1848 laughing gas entertainments were held for a week in the Baptist Church.⁴ "Twenty or thirty ladies and gentlemen inhaled the gas each evening and entertainment was such that the audience was kept in a roar of laughter during the whole exhibition. Sixty gallons of the gas were prepared for each evening and it was declared to be perfectly innocuous, containing not a particle of ether, and could be respired frequently with great advantage to the general health. Dr. Hirley who was in charge of the parties, agreed to give private enter-

tainments at a reasonable price." The year 1849 was a tragic one; the great fire destroyed a large and important part of the city, and a cholera epidemic caused an appalling loss of human life. "Funeral processions crowded every street. No vehicle could be seen except doctors' cabs, and coaches passing to and fro from the cemeteries, and hearses, often solitary, making their way toward their gloomy destination. The hum of trade was hushed, the levee was a desert, the streets, wont to shine with fashion and beauty, were silent. The cemeteries, homes of the dead, were the only places where there was life, for the incessant rumblings of carriages and the tramping of feet and the murmur of voices were heard there. Physicians were kept continually on the move, on visits of mercy, going hither and thither with no hope of fee or reward, except that which might follow them to the afterworld. Some reeled through the streets like drunken men, from sheer fatigue and exhaustion."⁵ In the same year the Board of Public Health was organized. In 1853 Elliot Seminary, soon to become Washington University, was founded. There was objection in 1854 to a proposal to have cars on the street drawn by horses. The year 1855 saw the first train run west from St. Louis. From 1840 to 1860 the population of St. Louis increased ten fold; from sixteen thousand to one hundred and sixty thousand.

The press in those days delighted in articles on medicine and surgery. The following is a typical example:⁶ "Professor J. N. McDowell, of Kemper, removed a lady's breast for cancer. He operated with a steady and unflinching hand. Time of cutting was two minutes. The wound healed in fifteen days. The doctor's intimate acquaintance with the structure of the body and his abundance of nerve make him qualified for the practice of surgery. The lady bore the operation with the heroism of a Spartan Dame."

The Medical Department of Kemper College prospered. Success during those early years was beyond the expectation of the founders. The second year opened in the fall of 1841 with two changes in the original faculty. Dr. Hall and Dr. Prout had resigned, to join Dr. Prather in organizing an active medical department of St. Louis University.⁷ This of necessity drew away some students. The third class, however, was still larger than that of the previous year and the importance

of the new school was now evident. The first building of the College, on the west side of Ninth Street, just south of Cerre Street, was started in June, 1840, and was finished by the time the school opened in the fall. In 1841 it was enlarged to twice its original size. We have, fortunately, a description of the building at that time.⁸ "It is divided into an amphi-theater, a



Dr. McDowell's Medical College, a Branch of Kemper College, St. Louis. Built in 1840 (The building faced east, Chouteau's Lake in the rear.) Design by Mr. Lewis; drawing by Mr. Drake.

Chemical Hall and laboratory, and a common lecturing hall, each of which can contain 500 pupils. There are also two spacious dissecting rooms (they were located just under the roof), and private rooms for the professors. The gallery of the amphi-theater is arranged for an anatomical museum and library, and contains many fine preparations in anatomy, and numerous specimens in Craniology, Geology, Mineralogy, etc., besides various natural curiosities. The top of the building immediately in front, is surmounted by a gallery, and from the center of the roof rises an observatory of octangular form, which is supplied with the necessary apparatus."

It should be noted that, at this period, members of the faculty sponsored the formation of the *Missouri Medical and Surgical Journal*. This occurred in 1845, two years after the

establishment of the *St. Louis Medical and Surgical Journal*. The two journals combined in 1849, and continued under the name of the latter. This short-lived publication contains many interesting articles by members of the early faculty.

Kemper College lacked the financial support to carry on its ambitious undertaking. In 1845 indebtedness had become so large it was forced to suspend activity. This necessitated some new arrangement for the Medical School. A group, including Dr. McDowell, petitioned the state legislature for the incorporation of a new organization. This was approved February 6, 1845, as "An Act to incorporate the Missouri Institute of Science."⁹ The Trustees were to be, Thomas Watson, William Millburn, Robert Kyle, J. N. McDowell and James Gordon. The act bestowed the various powers of a university, such as the granting of degrees, and gave details as to organization and finances. In the mean time there were earnest solicitations to join the University of the State of Missouri.¹⁰ The medical faculty, thereupon, held a meeting at which a resolution was adopted instructing the Dean to open negotiations with the State University at Columbia, with a view to establishing a connection with that institution.¹¹ In February, 1846, satisfactory arrangements were concluded and the school became the Medical Department of the University of the State of Missouri.

The increasing size of the early classes, drawn not only from the surrounding states but from the South, and the growing faith of the public in the enterprise, seemed to assure success for the school. This inspired the faculty with such high hopes for the future that they determined upon erecting "a magnificent college building." For those days it was a pretentious undertaking; in a rather primitive community, located in a sparsely settled country. How the undertaking was financed is today a mystery. It is interesting that a friend said of Dr. McDowell, "as a financier he was an utter failure." The burden undoubtedly fell on the faculty and a few of their friends.* It is possible that no medical school building in

* Dr. Richard F. Barrett, a friend of Dr. McDowell, helped to organize the college in 1840 (see Scharf, p. 677). In 1841 he was made Prof. of *Materia Medica* and *Medical Botany* and later Prof. of *Materia Medica* and *Physiology*. Dr. Barrett was a wealthy man and may have contributed important financial aid to the school in those early days.

the country at this time was so well adapted to its purposes. For many years it was a conspicuous edifice in the city. The unique architectural qualities and the fact that during the Civil War it was a notorious rebel prison add to the interest in this structure.

One may read the following interesting, contemporary note about the building:¹²

"In our rambles, some five or six years ago, we observed near the corner of Eighth and Gratiot Streets an excavation in which had been commenced the foundation of a building that seemed to be designed for a public edifice; but neither the ground plan, which presented the outline of an octagon, nor the massive foundation walls, composed of immensely large blocks of stone, afforded any clue by which we could arrive at a satisfactory conclusion in respect to the particular purpose for which it was intended. The location was near one of our favorite walks, and we observed that the walls rose by very slow degrees; indeed, at times, the work seemed to have been abandoned; but again, the workmen were to be seen upon the walls augmenting their height by adding another course of massive blocks to the pile. Many were the surmises in regard to the objects of the building: some said the projector was mad, and few seemed to entertain the opinion that he would live to see the work accomplished. In the meantime the foundation of another building was laid, adjoining the octagon on the north, and as the walls of this progressed, the plan of a medical college, spacious in dimensions and commodious in all its arrangements, began to develop to the eye of the intelligent observer. As the walls increased in height, they seemed to advance more rapidly; and finally, after the lapse of a few summers, the entire plan was completed, presenting in its lofty octagon of solid masonry four feet in thickness, the most remarkable edifice in the city."

In his chapter on the Civil War, Scharf describes the building.¹³ "It was situated on the northwest corner of Eighth and Gratiot Streets, and consisted of a large octagonal building of gray stone, with arched and square windows, reminding one of port-holes in some antiquated fort or castellated structure, surmounted by an oddly-shaped dome, and flanked by

two wings, the southern situated directly on the corner of Eighth and Gratiot Streets, and the northern extending to the building of the Christian Brothers. The fortress-like appearance of the central structure gave some color of probability, with the credulous, to a story which gained wide circulation, that Dr. McDowell, in erecting it, contemplated the possibility of having some day to make a military defense of the structure."

Construction of the edifice was started in 1847 and extended over a number of years. The main part of the central octagon and the north wing were completed in 1849, but not used until the following summer.* The dome and the south wing were not completed until later in the fifties.

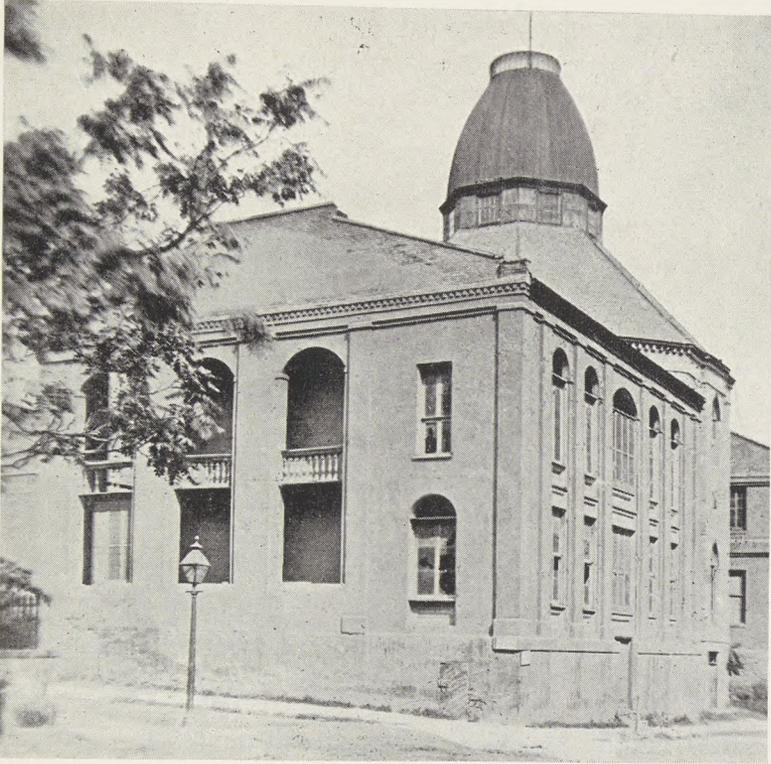
One finds the following interesting descriptions of the interior of the structure:

"The style of the octagon is Gothic and is divided into three stories. The first is the dispensary, where necessary surgical operations are performed gratuitously. The second is the faculty room and library. The third is the great Anatomical Amphitheater, which is one of the best arranged and most magnificent lecture rooms in the United States. The diameter is seventy feet and the height to the dome fifty-two feet. The seats are arranged in circular form, above which is a spacious gallery where anatomical specimens, paintings, etc., are systematically arranged; the whole is lighted by six large gothic windows overlooking the seats, whilst from the dome light is thrown directly upon the operating table through eight large sky lights. The brick building attached to the octagon is ninety by seventy feet and contains three stories and an attic. On the first floor is the chemical lecture room and on the second the common lecture room. The third floor is wholly occupied as a museum whilst the fourth is the common dissecting room."¹⁴

"The laboratory room has elevated seats, in order that the

* One finds evidence that the old building was still in use in the fall of 1849, for at that time an enraged mob threatened to destroy it, convinced that they would find there the body of a woman who had mysteriously disappeared. Dr. McDowell, part of his faculty and the student body, heavily armed, were stationed at various posts and organized as if for a small war. The battle was prevented by a large detachment of police. It was later learned by her husband that the missing woman had run away with another man.

audience may be able to witness every experiment of the lecture. The chemical and philosophical apparatus is one of the most complete in the country. The common lecture room is neatly furnished, the walls being covered with splendid



Missouri Medical College, located on Eighth and Gratiot Streets. McDowell's second college building. Used by the Government as a rebel prison in the Civil War.

oil paintings appropriate to the place. The anatomical amphitheater is light and airy, and has ample accommodations for one thousand persons. A large dissecting room is attached to the amphitheater. It is forty-five by eighty-five feet, well ventilated and warmed, and provided with gas lights, etc. The library room is of the same size and shape as the amphitheater. It is elegantly furnished and contains a superior collection of books, paintings, engravings, specimens, statuary, etc. The anatomical museum is provided with a large number

of dried and cut preparations of various parts of the human body, elegantly prepared—showing the osseous, ligamentous, muscular, vascular and nervous systems; also a fine collection of pathological and embryological specimens—the latter showing the various stages of development almost from impregnation to birth. Also a sufficient number of monstrosities to give variety to the collection. The general museum contains an immense collection of fossils illustrating the geology of the Mississippi Valley in its various parts, admirably arranged by one of the best geologists in the country; a vast collection of minerals, a magnificent collection of ornithological specimens; a good collection of fish, reptiles, and mammals; many curious and interesting things such as specimens of art and manufacture, with a larger number of Indian curiosities than can be found elsewhere in the Valley.”¹⁵

“Yesterday we walked through the extensive structure and were struck by the spacious and commodious character of the lecture rooms. The museum and anatomical theater, both of which are completed, are the best rooms of the kind we have seen; while the stairways leading to the different portions of the buildings are wide and, when completed, will give a handsome finish to the passages.”¹⁶

Little for particular note occurred during the next few years. There appears to have been the average number of “agreeable and inevitably disagreeable incidents, which are the certain heritage peculiar to medical faculties.” In reference to the mind of the student at this period we have some interesting material in the Snyder Collection preserved in the archives of the Missouri Historical Society.* There are petitions signed by the students and usually addressed to the Dean. They are respectful, but emphatic and to the point. Radical demands are presented and specific threats made as to action if they are not carried out. On January 7, 1853, “considering the many disadvantages under which the institution is laboring,” they resolve “that Professor McDowell divide his chair, that of anatomy and surgery” and comment on filling the vacancy created. At the same time they express

* The author is indebted to Stella M. Drumm, Librarian of the Missouri Historical Society, for directing his attention to this collection and for many other valuable suggestions.

regret that, because of ill health, Professor Bennett plans to resign. On February 4, 1853, they desire Dr. McDowell to vacate the chair of Anatomy. Further resolutions express their approval of Dr. John T. Hodgen. In the catalogue for the following year we find, Dr. McDowell, Professor of Surgery and Surgical Anatomy and Dr. Hodgen, Professor of Anatomy, General and Special.

The extent to which patients were used for practical clinical instruction in the early days of the old school is an interesting question. The only hospital in St. Louis during the first few years was the Sisters' Hospital, often referred to as the St. Louis Hospital. We find evidence that it was used at that time for teaching purposes but hesitate to suggest to what extent. An editorial in the *St. Louis Medical and Surgical Journal* for January, 1844, comments on the abundance of clinical material in the St. Louis Hospital and the use being made of it by students. The circular for the school published in May, 1844, states, "from the first of July to the first of January, a regular course will be delivered in the hospital"; that for the following year, "during one half of the year medical clinics are delivered three times per week by the Professor of Clinical Medicine and surgical operations are performed and clinics delivered frequently by the Professor of Anatomy and Surgery." At that time students were required to have practical experience with practicing physicians. Specifically, we read: "The requirements for graduation are, that the student shall not be less than twenty-one years of age, of good moral character—shall have enjoyed the advantages of two years' private pupilage, and have attended two full courses of lectures, the last of which must have been in this school; write and defend a thesis on some medical subject, and stand a satisfactory examination before the Faculty; or shall attend three successive courses of lectures, without private pupilage; or shall have been engaged in a reputable practice for three years, and have attended one course of lectures in this school, together with the before mentioned prerequisites."¹⁷ The first free dispensary in St. Louis was founded in 1842 by a group of physicians including several members of the faculty, but we have no evidence that it was used by the school. In those early days Dr. McDowell

had a "Surgical Infirmary" on Ninth Street, near the medical school and with Dr. R. F. Stevens an "Eye and Ear Infirmary" opposite the Court House, on Fourth Street. It seems quite likely that some patients from these sources were occasionally used for demonstration. Plans for the City Hospital were completed in 1845.¹⁸ The year before the school announced "our pupils have the advantages of the wards of the City Hospital and Workhouse, where they can see every variety of disease and every species of surgical operation."¹⁹ The City Hospital did not open until August, 1846. We know that the first building had at least one lecture room. Dr. McDowell was appointed by the president of the United States, in 1849 or 1850, physician and surgeon of the Marine Hospital "to take place as soon as the hospital is completed." The building was under roof in 1852 and patients were received in 1855. In the summer of 1852 the Council of the City of St. Louis passed an ordinance making "a liberal appropriation of money for the establishment and support of a dispensary to be connected with the Medical Department of the Missouri University." In the fall of the same year this dispensary was first opened for the reception of patients in the college building. Following destruction by fire, in May, 1856, the City Hospital was rebuilt with "an amphitheater seating over four hundred."

It became necessary again to change the name of the institution. On December 4, 1855, the Legislature of Missouri passed an Act reorganizing the State University. Article II, Section 24,²⁰ "declared vacant on the fourth of June next all offices held by president, professors and tutors in the University" and that "the curators shall have power to appoint the president, professors and tutors of the University, no one of whom shall exercise the function of any one of the learned professions during his continuance in office." The events which followed are clearly related by referring to the press of the day.²¹ "Proceedings of the Board of Curators so far as relates to the election of Faculty On Thursday the remaining chair was filled, the election of the Faculty of the Medical Department of the University at St. Louis, indefinitely postponed" Further on in the same news article we read: "Medical Department. The Board of Curators, dur-

ing the recent session, passed the following preamble and resolution in relation to the Medical Department: Whereas, by an act of the last legislature concerning the University, all offices in the University were vacated on the 4th inst. and by the same section it is provided that no person who shall be appointed to the office of President, Professor or Tutor shall exercise the function of any one of the learned professions during his continuance in office; therefore, believing, as we are bound to do, that persons fit to act as Professors in a Medical School are also well qualified to practice medicine, and inasmuch as the Board cannot consent to deprive the citizens of St. Louis and of the State of the valuable services of nine medical gentlemen; Resolved, that the Board deems it improper to proceed to elect Professors in the Medical School."

Continuation as the Medical Department of the State University, therefore, became impossible. Accordingly, the organization reverted to the old charter granted in 1845 and became the Medical Department of the Missouri Institute of Science.* The announcement for the next year (1857-58), however, presents the designation "Missouri Medical College." Thus it was known until it became, in 1899, with St. Louis Medical College, the Medical Department of Washington University.

* One notes a change from the original board of trustees. They are at this time, Joseph N. McDowell, Thomas Watson, William Milburn, Archibald Gamble and John S. Moore.

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Hypertension

BY PETER HEINBECKER, M.D.

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Few subjects have greater interest for the medical profession than that of hypertension because, like cancer, it is essentially a disease of civilization and like cancer its incidence seems to be increasing rapidly. In the United States it is probable that upwards of 140,000 persons each year fall a victim to its devastating effects on the heart, the kidneys and the brain. The life expectancy of persons with hypertension is shortened so that where you can expect one man with a blood pressure under 140 to die, eight will die whose blood pressure is 200 and over.

The etiology of the disease is often thought still to be entirely obscure. This is far from being the case. We now know that of the three possible factors which by their augmentation could be responsible for an increase in blood pressure, namely, volume flow of blood, blood viscosity and peripheral vascular resistance, only the latter is of real consequence except in the hypertension associated with thyrotoxicosis where the volume flow of blood is also increased. Even the mechanism of increased peripheral resistance is no longer unknown in all instances. The work of Goldblatt of Cleveland and others has shown that hypertension follows the constriction of the renal arteries. The prevailing hypothesis is that under ischaemic conditions the kidney releases a substance which increases the tone of blood vessels so that hypertension follows. This action does not require the nervous system because this type of hypertension can be produced in animals with the entire peripheral sympathetic nervous system removed. It does, however, require the presence of the adrenal cortical hormone. Hypertension associated with glomerular nephritis and other renal infections probably has a similar mechanism. It is known that hypertension may result from the secretion of adrenal tumors, be they cortical or medullary in type. Removal of these tumors results in a cure of the hypertension. The hypertension which develops from in-

creased intracranial pressure is the result of stimulation of the vaso-constrictor mechanism of the brain. Severance of the spinal cord high up eliminates this type of hypertension. Another form of hypertension follows the elimination of depressor nerve fibers which arise from the base of the aorta and the carotid sinus.

It is evident then that hypertension is a condition which may arise as the result of factors originating in the kidneys, the adrenal glands and the nervous system. The relative importance of these various factors in each particular case differs. There remains for future accomplishment a satisfactory demonstration of the presence of a pressor substance in the circulating blood from the ischaemic kidney and an elucidation of the manner of development of ischaemia in the kidney to begin with.

One effect of hypertension is to increase the load of the heart. This ultimately results in its hypertrophy and possible failure through dilatation. It is noteworthy that in hypertension the pulse rate rises with the increase in blood pressure. It does not fall as the blood pressure rises as it does normally under physiological conditions. Continued hypertension in the body results in generalized vascular disease involving not only the kidneys but also the brain, the eyes and the viscera. Arterial degeneration in the brain may lead to apoplexy.

Hypertension exists in different degrees of severity and its rate of progression also varies. In mild cases the onset occurs in persons between 35 to 45 years of age. In ten to fifteen years the disease progresses to where the systolic blood pressure rises to 170 to 180 mm. Persons so afflicted frequently die of diseases other than those related to their hypertension. Then there is the moderately severe type of case. It usually begins in persons between the ages of 30 to 40. In three to five years the diastolic pressure rises to 100 to 110 mm. the systolic to about 200 mm. The life expectancy is not more than five years. Finally there is a malignant form of the disease affecting individuals between the ages of 25 to 45. It runs a rapid course. In six months to a year the blood pressure rises to a diastolic pressure of 130 to 150 mm. and a systolic pressure of 250 to 300 mm. Death usually results in one to three years.

From the patient's standpoint the important matter is that of treatment. Medical treatment consists in securing mental and physical rest for the patient. The diet is adjusted to reduce obesity if present. Sedatives, especially bromides and barbiturates, are prescribed when rest alone is not enough. Such measures are adequate in the benign cases. They offer relatively little in the more severe cases, especially those of the malignant type.

During the past five years a number of patients with hypertension have been subjected to surgery with rather gratifying results in the early and milder cases but with somewhat disappointing results in the later and most severe cases. The surgical procedures employed have aimed at denervation of the kidneys and the adrenal glands. By this means spasm of the renal arteries of vaso-motor origin can be eliminated. The lessening of reflexly released epinephrine has a quieting effect on the individual's psychic reactions. The operation can be carried out safely. It does not produce any disabling effects. It may produce sterility in the male. It eliminates sweating from the denervated areas. It often improves intestinal function. The effect on blood pressure is considerable in early mild cases but in late cases the effect is minimal or absent. The patient's sense of well being is often improved much more than the blood pressure is lowered. Relief from headache, nervousness and cardiac pain follow in a high percentage of cases regardless of the effect on the blood pressure.

Our experience with sympathectomy for essential hypertension leads us to advise the operation for patients who have early hypertension. This is especially true if there exists a family history of hypertension.

Analyzing "Brain Waves"

BY ROBERT ELMAN, M.D.

The electro-physical nature of the nerve impulse has long been known; it is not surprising that the central stations in the brain are also governed by the same mechanism. The first measurements of electrical phenomena in the human brain were made by Berger¹ and are often spoken of as Berger rhythms. Two electrodes are placed at various points on the scalp and the potential differences between them measured. Since the actual current is extremely weak its detection depends on the ability of the observer to magnify these tiny impulses. This is made possible by an amplifier, one of radio's many contributions to biological research. These electrical impulses, thus amplified, can be recorded by means of a cathode ray oscillograph which is a very quick-acting voltmeter, and take the form of waves of various kinds. These curves or graphs are technically called cortical action potentials but are popularly known as "brain waves."

Inasmuch as these "brain waves" are the physical parallels of the mental processes, the way seemed clear now by which the activities of the mind could be translated into a series of action potentials. A great many observations on the human were made; curves were obtained during sleep, during various types of activities, during periods of mental effort, during the exhibition of various emotions, even during epileptic seizures. Two types of waves, alpha and beta, were first described, the former being associated with cortical activity. Babies do not exhibit alpha waves because the cortex of a baby does not function. Prominent among these studies are those of Davis and Davis of Harvard, Gibbs, Gibbs and Lennox of Chicago, and Adrian of London.

While these observations, interesting and important, were made it became apparent, very soon, that these spontaneous "brain waves" were of unbelievable complexity; they could be correlated in only a limited way with the individual's objective or subjective behavior. This complexity is not difficult to understand; it might be compared with the problems always presented by any new mechanism, new that is to the persons

who meet it for the first time. If a man from Mars found himself in Radio City while all the inhabitants were gone, annihilated by some deadly gas perhaps, what would he think of the amazing electrical apparatus and the complexity of the millions of wires connecting them? He might even gaze with bewilderment behind a large hospital switchboard, mystified by the countless wires running hither and thither with no apparent pattern or purpose. But if he were persistent, intelligent and industrious he should be able eventually to unravel its mysteries and even, if lucky, actually operate it. Another example might be the old story of a steamship, stranded in primitive waters, its crew entirely disappeared. It is boarded by a native, intelligent enough to investigate the bewildering machine. By various devices, mostly trial and error, he finally unravels the mystery of each valve and lever, and, after some time, unfathoms all of its mechanical complexities, shovels coal, works up steam and sails off to the plaudits of his tribe.

The problem of analyzing "brain waves" must be somewhat similar; one must trace, in other words, an enormously complex electrical switchboard connected with millions of end mechanisms. To do so it is obviously necessary to use animals which, like the human, also exhibit "brain waves." Although Berger did a few experiments, most of the observations in animals are being carried out in this country. Bartley and Newman working at the University of Kansas, in 1931, reported their first observations on dogs. Gerard, Marshall and Saul made extensive experiments at the University of Chicago. From these and other studies it seemed clear that the cooperation of anatomical and physiological experimentors is needed before the mysteries will ultimately be solved.

Cooperative studies of this sort are now being carried out at the Washington University Medical School, studies which aim, first of all, to correlate knowledge of the neuroanatomical pathways in the brain with specifically induced impulses which travel over them. This knowledge should diminish the maze of uncertainty involved in interpreting the spontaneous "brain waves" as they occur under uncontrolled circumstances. The anatomical studies have as their goal the "wiring" arrangements of the various brain circuits. For this purpose

the Golgi method was used by O'Leary⁶ of the Department of Cytology. He started with the investigation of the olfactory cortex, which is relatively simple due to the absence of spatial reference in the sense of smell. As a result of this study O'Leary was able to work out "wiring diagrams" of various possible circuits which are followed by the sense of smell in reaching the cortex. Among other things he showed how the complex connections of axon-endings and dendrites were able to set up reverberating pathways,⁷ a sort of regenerative circuit which, in fact, is probably responsible for some of the "brain waves." More important is the fact that, led by such anatomical information, it was possible to determine just where to place the electrodes in order to record specific, constant and reproducible "brain waves." The electrical events as recorded in this way indicated responses of successive cell groups in the cortex; the prospect of recognizing more and more of these cell groups is becoming better with further study.

Preceding these studies of O'Leary, was the observation in 1933, by Bartley and Bishop, of the Laboratories of Neurophysiology, that relatively simple "brain waves" of a specific pattern followed a single electrical stimulus to a peripheral nerve, in this case the optic nerve.⁸ This was an important advance because it showed how certain "brain waves" could be produced and thus established a cause and effect relationship which up until then was lacking. Of interest also was the observation that such a stimulus lasting but 1/500th of a second will provoke a series of cortical action potentials lasting 100 times as long or 1/5th second. This is due to the fact that it takes time for the original stimulus to travel around via its various circuits, possibly the reverberating circuits already mentioned. Another group of observations concerned itself with the effect of strychnine applied locally to the cortex. In this way Bartley, O'Leary and Bishop⁹ were able to produce changes in the type of the "brain wave" which enabled them to break it down into two sequences and thus further to simplify the originally complex curve. By correlating the records so taken from different strata of the cortex with the histological structure involved, additional information was obtained. The two sequences just mentioned, set up by a

single peripheral stimulus, could be traced through the various layers of the cortex. One of these series of curves appeared to represent the cortical response to the specific visual stimulus, whereas the other was associated with the background state of the cortex, which determines how it will respond to a second stimulus. In other words, these two curves differentiated the visual from the integrating mechanisms of the cortex. On the scale of consciousness this mechanism of integration corresponds to the phenomena of attention and memory.

These studies are but the beginning of important explorations into the dark mechanisms of the mind. These investigations are breaking down the mysterious complexities of the spontaneously occurring "brain waves" into specific patterns induced by specific stimuli and following specific pathways. It is probably only by a combination of anatomical and physiological research of this type that the many problems will eventually be solved. Ultimately, these studies may rob the mind of its metaphysical mysteries and substitute for it a series of intricate but understandable electrical circuits.

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2. Davis, H. and P. A. Davis: Action Potentials of the Brain in Normal Persons and in Normal States of Cerebral Activity, Arch. Neur. and Psych., 1936; 36, 1214.
3. Gibbs, F. A., E. L. Gibbs and W. G. Lennox; Cerebral Dysrhythmias of Epilepsy, Arch. Neurol. and Psych., 1938; 39, 298.
4. Bartley, S. H. and E. B. Newman: Studies on Dog's Cortex; Sensorimotor Areas, Am. J. Physiol., 1931; 99, 1.
5. Gerard, R. W., W. H. Marshall and L. J. Saul: Electrical Activity of Cat's Brain, Arch. Neurol. and Psychiat., 1936; 36, 675.
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7. Ransom, S. W. and J. C. Hinsey: Reflexes in the Hind Limbs of Cats After Transection of the Spinal Cord at Various Levels, Amer. J. Physiol., 1930; 94, 471.
8. Bartley, S. H. and G. H. Bishop: The Cortical Response to Stimulation of The Optic Nerve in the Rabbit, Am. J. Physiol., 1933; 103, 159.
9. Bartley, S. H., J. L. O'Leary and G. H. Bishop: Differentiation by Strychnine of the Visual from the Integrating Mechanisms of Optic Cortex in the Rabbit, Am. J. Physiol., 1937; 120, 604.

News of the School

The honorary degree of Doctor of Science was conferred upon Dean Philip A. Shaffer by the University of Rochester on June 19, 1939. Dr. Shaffer was presented for the degree at the commencement exercises by Professor Walter R. Bloor who said:

"Mr. President: I wish to present, for special distinction, Dr. Philip Anderson Shaffer, Professor of Biochemistry and Dean of the Washington University Medical School at St. Louis, Missouri.

"Professor Shaffer, early in life, had the good fortune to come into contact with one of the great investigators of our time, Professor Otto Folin, then professor at his alma mater, West Virginia University. When Folin went to MacLean Hospital near Boston, he took his enthusiastic young assistant with him. Folin was then beginning his classical research on the mechanism of protein metabolism and Dr. Shaffer had thus an early introduction to a fundamental problem in physiology. The work done at the MacLean Hospital earned him his Doctor of Philosophy at Harvard in 1904. Then he went to Cornell Medical College to take charge of work in pathological chemistry, and, after six years there, at the age of twenty-nine, he was called to St. Louis to take part as Professor of Biochemistry in the organization of the newly established Washington University Medical School. He has been there ever since. He was dean of the school from 1915 to 1919 and has recently been elected dean for the second time. There is no doubt that the rise of this great school is in very considerable part due to the efforts of Doctor Shaffer. He served four terms as president of his National Society of Biological Chemists, two years as vice-president, and a second two years as president. During the war he was Major in the Sanitary Corps, Food and Medical Division in charge of the work in France under our own Dr. Murlin. He is a member of the National Academy of Science and of numerous other scientific societies. In addition to his scientific accomplishment, he has, throughout his life, taken a deep interest in the human side of his environment, and both in his national society and in

the medical school has exerted a profound influence on the policies of these institutions. He has done notable work in protein metabolism in mental diseases and typhoid fever, on tumors, on oxidation-reduction of sugars and on coupled reactions related to biochemistry. He represents the modern conception of the head of a medical school — investigator, teacher and administrator.

“It is with great pleasure, therefore, that I present Philip Shaffer to you for special distinction.”

President Valentine, in conferring the degree, said:

“Pioneer in a new world of the chemistry of life, you have brought back knowledge to conquer the old world of disease. From the study of man as a compound you have frequently turned to the understanding of men as humans, and have led them always toward truth as well as health.

“By virtue of the authority vested in me by the Board of Trustees of this University, I confer upon you the honorary degree of Doctor of Science, and hand you this diploma as a token of our admiration and good will.”

On July 1, the School of Medicine assumed direction of the entire service of the new Homer G. Phillips (Colored) Hospital, “City Hospital No. 2.” Dr. T. K. Brown, '24, has been appointed chief of staff, and also director of the obstetrics and gynecology service; Dr. Leo Gottlieb, '32, will direct the medical service, Dr. Robert Elman, the surgical, and Dr. Wayne Rupe, '18, the pediatrics service. The remarkable facilities the hospital affords for teaching are being extensively developed.

Dr. Evarts A. Graham sailed in June for London, where he will be head of the summer teaching surgical unit at St. Bartholomew's Hospital in London. In alternate years the temporary position as head of the unit is offered to distinguished British surgeons. Dr. Graham is the first American surgeon to receive the invitation. He will return about the first of September.

REUNION OF BARNES HOSPITAL EX-HOUSE OFFICERS

Almost a hundred old house officers, about fifty of them from out of town, attended the reunion luncheon given by the Barnes Hospital Society at Barnes Hospital on Tuesday, May 16th, during the A. M. A. session in St. Louis. Luncheon was served at one o'clock in the Interns dining room. Everyone enjoyed meeting old pals of house officer days, and many felt that such reunions held at intervals of several years, would strengthen old ties and give out of town men an excuse to return and see and talk to their old friends and chiefs of service; that perhaps a two-day session of clinics by the old chiefs might add to such an occasion.

It was much regretted that Dr. George Dock, who was in town to deliver the Frank Billings Lecture, was not able to attend.

Not all who attended the luncheon signed the register, but among those thus noted were: W. E. Adams, Chicago; Edmond Bechtold, '15, Belleville; D. T. Berg, '23, Helena, Mont.; J. R. Cochran, '31, Fort Worth; J. P. Conway, '30, Milwaukee; Harold F. Corson, '23, Stockbridge, Mass.; George D. Curtis, '33, Cleveland; L. E. Darrough, '24, Dallas; Wm. J. Dieckmann, '22, Chicago; Robert M. Evans, '26, Russiaville, Ind.; L. H. Fuson, '15, St. Joseph; Jas. G. Fowler, Buffalo; A. A. Gilbert, '14, Fayetteville, Ark.; Jos. W. Gale, '24, Madison, Wis.; Clifford Gilles, '19, Kansas City; H. H. Hagan, Louisville; George Herrmann, Galveston; H. P. Jenkins, Chicago; N. Kenneth Jensen, '35, Minneapolis; Virgil Jeans, '32, Fresno, Cal.; L. J. Kilian, '13, Wakefield, Neb.; O. W. Lohr, '21, Saginaw, Mich.; G. L. McBee, Pendleton, Ore.; J. Y. Malone, '21, Milwaukee; Jake Mayer, Mayfield, Ky.; Howard B. Mettel, Indianapolis; J. W. McKinney, Memphis; R. L. Murdoch, '19, Oklahoma City; Alton Ochsner, '20, New Orleans; Myron Prinzmetal, Los Angeles; John Post, Chicago; E. F. Pearson, '30, Springfield, Ill.; R. W. Rudolph, Tucson; Fred Reynolds, '34, Indianapolis; David E. Smith, '14, Bonne Terre, Mo.; A. N. Schanche, '25, Ames, Iowa; C. C. Sherburne, '21, Columbus, Ohio; Ray T. Woolsev, '16, Salt Lake City; Ernest H. White, Little Rock; Walter M. Whitaker, '27, Quincy, Ill.; and a good number of the men in town.

At the annual meeting of the American Association of Physical Anthropologists held in Philadelphia, April 4, Dr. Robert J. Terry was elected president.

This year for the first time, surgical interns at Barnes Hospital will be given as part of their training six weeks each at Barnard Skin and Cancer Hospital in order to study surgical diagnosis and treatment of cancer and diseases of the skin.

Nine doctors, from widely separated parts of the country, registered this June for the four weeks postgraduate course in obstetrics and gynecology given by the School of Medicine.

Dr. Charles Hoagland, '35, who has been directing the blood chemistry laboratories, has been appointed associate at the Rockefeller Hospital, New York, where he will do research on chemical phases of immunology.

Dr. George D. Williams of the department of anatomy has been on leave of absence in Rio de Janeiro since March. He is making a study of the relation of racial type, economic condition and density of population to the incidence of tuberculosis in Brazilian whites and negroes and has been given a National Research Council grant to continue his work.

The Committee on Awards, Scientific Exhibit, of the A. M. A. awarded the Bronze Medal for the exhibit on Functions of the Frontal Lobe, prepared by Drs. Carlyle F. Jacobsen of Washington University and Drs. J. F. Fulton and Margaret Kennard of Yale University.

For the exhibit illustrating acute pancreatic disease the Committee on Awards, Scientific Exhibit, A. M. A. conferred "Honorable Mention." Robert Elman, Charles L. Hoagland, L. H. Hempleman, Jr., and Wilson G. Brown prepared the exhibit.

Announcement was recently made that Dr. Frank R. Bradley, '28, had been appointed superintendent of Barnes Hospital, to succeed Dr. Louis H. Burlingham. Dr. Bradley came to Barnes Hospital as assistant superintendent in October after his graduation from Medical School. In February of this year he was elected president of the Missouri Hospital Association. On Dr. Burlingham's resignation in April, he became

acting superintendent of the Hospital. His appointment as superintendent was announced the last week in June.

Dr. A. P. Rowlette, Superintendent St. Louis City Hospital, states that the intern group this year includes the following 1939 graduates of the Washington University School of Medicine: Drs. Ben Berman, Waite Bohne, Joseph Borenstine, Earl Burbidge, Edward Canepa, Patrick Cockett, Carl Epstein, George Fraser, John Graham, John R. Hall, Jr., John E. Helm, George Hess, Robert Hoover, Leonard Jacobson, Fred Jordan, Theodore Kircher, Reuben Maxwell, Wilkins Nuttall, Donald Robinson, Stanley Roper, Allen Tigert, Samuel Wallace, Maurice Woll.

The senior house officers include Dr. Marshall Kelly, '36, resident in surgery, Drs. Lynn, '38, Robinson, '38, Carter, '38, assistant residents in surgery; Dr. John Flynn, '36, resident in obstetrics-gynecology; Dr. Kitchen, '37, and Dr. Hawker, '38, assistant residents in gynecology and obstetrics.

The building program at the St. Louis City Hospital is rapidly assuming shape. The Malcolm A. Bliss Psychopathic Institute will be finished on or about August 1. The new power house has just been opened and the new laundry and service building are under construction.

Construction of a new thirteen story hospital building will begin about November 1, 1939, and will house a new receiving room, new X-ray department, new operating rooms and ten floors for patients. This should be completed by January 1, 1941.

Staff reorganization, which became effective July 1, will allocate one-third of the beds in each specialty to each of three units, Washington University assuming responsibility of one third.

Medical Library

The library kept open house during the American Medical Association convention and we were very glad to greet all alumni who cared to visit us. The following were registered in the library:

Dr. G. N. Barry, Oklahoma City, 1930.

Dr. F. M. Canseco, Laredo, Texas, 1933.

Dr. Mary Townsend DeMotte, Phillipsburg, Kansas, 1930.

- Dr. James Carl Drake, Fresno, California, 1911.
 Dr. Reinhold M. Ericson, Minneapolis, Minn., 1928.
 Dr. A. W. Freshman, Denver, Colo., 1929.
 Dr. Levi Fuson, St. Joseph, Mo., 1914.
 Dr. Paul H. Guttman, Sacramento, California, 1927.
 Dr. Sandor Horwitz, Peoria, Ill., 1895.
 Dr. Walfred Johnson, Sauk Center, Minnesota, 1922.
 Dr. Oliver W. Lohr, Saginaw, Michigan, 1921.
 Dr. John E. Miksicek, St. Louis, 1937.
 Dr. Charles Silverberg, Washington, D. C., 1938.
 Dr. Harvey S. Smith, Iowa City, Iowa, 1937.
 Dr. Ralph O. Stickler, Kirksville, Mo., 1925.

We also had many visitors who came to see the Beaumont collection of manuscripts. They were very enthusiastic visitors.

The following publications have been added to the library recently:

- Allen, Edgar, *ed.* Sex and internal secretion. 2d ed. Balt., 1939.
 Allport, Gordon W. Personality. N. Y., 1937.
 American Council on Education. Construction and use of achievement examinations. Boston, 1936.
 Andrews, George C. Diseases of the skin. 2d ed. Phila. & Lond., 1938.
 Association for Research in Nervous and Mental Disease. Circulation of the brain and spinal cord. Balt., 1938.
 Cabot, R. C., and Adams, F. D. Physical diagnosis. 12th ed. Balt., 1938.
 Clark, W. E. Legros, et al. Hypothalamus. Edinburgh & Lond., 1938.
 Cowdry, E. V., *ed.* Problems of aging. Balt., 1939.
 Cushing, H. and Eisenhardt, L. Meningiomas. Springfield & Balt., 1938.
 DeLancy, F. P. Licensing of professions in West Virginia. Chicago, 1938.
 Drinker, C. K. Carbon monoxide asphyxia. Lond., 1938.
 Fishberg, A. M. Heart failure. Phila., 1937.
 Freud, Sigmund. Problem of anxiety. N. Y., 1936.
 Haden, R. L. Principles of hematology. Phila., 1939.
 Healy, William. Personality in formation and action. N. Y., 1938.
 Herman, Leon. Practice of urology. Phila., 1938.
 Horney, Karen. Neurotic personality of our time. N. Y., 1937.
 Horsburgh, D. B. and Heath, James P. Atlas of cat anatomy. London, 1938.
 Jung, C. G. Psychological types. N. Y., 1933.
 Just, E. E. Biology of cell surface. Phila., 1939.
 Kanner, Leo. Child psychiatry. Springfield & Balt., 1937.
 King, H. D. Life processes in gray Norway rats. Phila., 1939.
 Kretschmer, E. Text-book of medical psychology. Lond., 1934.
 Lake, N. C. The foot. 2d ed., Balt., 1938.
 Landis, C. and Page, J. D. Modern society and mental disease, N. Y., 1938.
 Larsell, O. Text-book of neuro-anatomy. N. Y., Lond., 1939.
 McClure, C. W., et al. Functional activities of the pancreas and liver. N. Y., 1937.
 Malamud, William. Outlines of general psychopathology. N. Y., 1935.

- Malinowski, B. Crime and custom in savage society. N. Y., 1932.
- Moulton, F. R., *ed.* Syphilis. Publication of the American Assn. for Advancement of Science, #6.
- Muenschler, W. C. Poisonous plants of the United States. N. Y., 1939.
- Murphy, W. P. Anemia in practice. Phila. & Lond., 1939.
- Myerson, Abraham. Social psychology. N. Y., 1934.
- Ormsby, O. S. Diseases of the skin. 5th ed. Phila., 1937.
- Piaget, Jean. Language and thought of the child. 2d ed. N. Y., 1932.
- Plant, J. S. Personality of the cultural pattern. N. Y., 1937.
- Riesman, David. Medicine in modern society. Princeton, 1939.
- Robinson, G. C. The patient as a person. N. Y., 1939.
- Ross, T. A. The common neuroses. 2d ed. Balt., 1938.
- Savill, A. Hair and scalp. 2d ed. Balt., 1937.
- Schilder, Paul. Psychotherapy. N. Y., 1938.
- Scott, W. W. Standard methods of chemical analysis. 5th ed. N. Y., 1939.
- Shwartzman, Gregory. Phenomenon of local tissue reactivity. N. Y., 1937.
- Simmons, J. S., et al. Malaria in Panama. Balt., 1939.
- Simpson, W. M., et al. Fever therapy. N. Y., 1937.
- Sollmann, T. H., and Hanzlik, P. J. Fundamentals of experimental pharmacology. 2d ed. San Francisco, 1939.
- Terry, G. C. Fever and psychoses. N. Y. & Lond., 1939.
- Thomson, Sir St. Clair, & Negus, V. E. Diseases of the nose and throat. 4th ed. N. Y. & Lond., 1937.
- Thorington, James. Refraction of the human eye. 3d ed. Phila., 1939.
- Wagensteen, O. H. Therapeutic problem in bowel obstruction. Springfield & Balt., 1937.
- Walker, A. Earl. Primate thalamus. Chicago, 1938.
- Williams, R. R., and Spies, T. D. Vitamin B₁ (Thiamin) and its use in medicine. N. Y., 1938.
- Zinsser, Hans, et al. Immunity. 5th ed. N. Y., 1939.

The library has added the following gifts to its collection:

- Bericht d. allgemeine aerztlichen Kongresses für Psychotherapie, volumes 1-5, 1926-1930. Gift of Dr. Val Satterfield.
- Bonichon, Mme. Pierre. Synthésés de composés derivant de l'orthonitranisol. Bordeaux, 1938. Gift of Dr. Frank Urban.
- Gesell, A. Biographies of child development. N. Y. & Lond., 1939. Gift of Dr. Veeder.
- Goldstein, Max A. The acoustic method. St. Louis, 1939. Gift of Dr. Goldstein.
- Marriott, Williams McKim. Memorial addresses. Gift of Marriott Memorial Fund.
- Soper, Horace W. Clinical gastroenterology. St. Louis, 1939. Gift of Dr. Soper.
- Stewart, G. H. Legal medicine. Indianapolis, 1910. Gift of Mr. William Crowdus.

Medical Alumni Association

MEDICAL ALUMNI BANQUET, MAY 17, ST. LOUIS

Attendance at the Alumni Banquet on May 17th broke all previous records: six hundred and forty-nine gathered together at the Jefferson Hotel. Seating was mostly by classes, and almost every class was well-represented. Class of 1932 probably had the biggest delegation, with twenty-two present. 1881 (St. Louis) had the largest majority present: its four delegates represented 80% of the living members of the class. Oldest graduate present was Dr. A. G. Henderson of Imboden, Arkansas, 1876 (Missouri) who sat at the speakers' table.

Speeches were almost held down to the advertised minimum, and after these were over, the Heidelberg Octet entertained for a half hour.

FIRST LECTURE ON TERRY LECTURESHIP

Dr. Lewis H. Weed, Professor of Anatomy and Director of the Johns Hopkins Medical School delivered the first lecture of the Robert J. Terry Lectureship, Wednesday, May 17, in the auditorium of the School of Medicine. His subject was "The Anatomist in Medical Education." The Lectureship was established in 1938 by subscriptions from the medical alumni. The Bulletin of the Association of American Medical Colleges is publishing Dr. Weed's scholarly address in full. The Alumni Association can be proud of so auspicious a beginning and realization of its plans in founding this lectureship, honoring a graduate and a teacher of Washington University School of Medicine.

CLASS REUNIONS

Class of 1893 (Missouri and St. Louis)

The class of 1893 celebrated its 46th anniversary at the annual medical alumni banquet on May 17. Both the St. Louis and Missouri Medical Schools were represented. The following were present: R. E. Gordon, El Paso, Illinois; J. N. English, Gillespie, Illinois; T. Guy Hetherlin, Louisiana, Missouri; Charles Riseling, Murphysboro, Illinois; Van H. Bond, Hornersville, Missouri; William Pfannebecker, Sigourney,

Iowa; Andrew Darling, Julius H. Gross, J. J. Meredith, H. M. Kinner, and M. R. Horwitz, of St. Louis.

Many were heard from who regretted their inability to attend.

All greatly enjoyed the banquet and were delighted with the extremely large attendance, showing the interest the alumni are taking in the school.

On the following evening, Dr. Kinner was host to the group at a dinner at Little Bevo. It was an unusually pleasant occasion, one that long will be remembered.

The class plans to continue having an annual reunion.

M. R. Horwitz.

Class of 1895 (Missouri)

Oltz House on the Craig Road, St. Louis County, was the homey spot "far from the maddening crowd," with its flowers and shade, where gathered members of the class of 1895, Missouri Medical College, who enjoy the country. It was a small and intimate family circle that sat and gossiped and reminisced about the table on the veranda following a delicious dinner: Charlie Ahlbrandt and family, George Gorin and daughter, Henry and Mrs. Horstman, "Duke" Horwitz, his daughter and granddaughter, Quin and his wife, Bob Schlueter and the Mrs., John and Mrs. Zahorsky, Bob Terry. This forty-fourth reunion was marked by the distinction given our class by the achievement of one of its members, namely Robert E. Schlueter, in solving all the problems and overcoming every obstacle in steering the affairs of the meeting of the A. M. A. with signal success, as chairman of the local committee on arrangements.

Class of 1899

There were two classes of medical students who received their degrees in medicine in 1899. One class of 84 graduated from the Missouri Medical School, and the other class of 33 graduated from St. Louis Medical School at 18th and Locust. The latter was the first class whose diploma read "Medical Department of Washington University."

At a banquet of the Medical Alumni Association of Washington University during the recent A. M. A. convention in

St. Louis, a roll call of this class of 33 showed that there were 15 on the active list, of which 30% responded as "present."

The interest and zeal with which the participating classmates propounded questions concerning the welfare and whereabouts of the absentees prompted me to submit the following list for information:

Fred. G. Abeken, 5319a S. Broadway, St. Louis
 Warren W. Bland, Vandalia, Missouri
 W. Edwin Cass, 1110 Esther Avenue, Vancouver, Wash.
 Charles Gowans, 6013 Cates, St. Louis
 Theophil J. Holke, 30 W. Stephenson, Freeport, Ill.
 R. Emmet Kane, 1117 N. Grand, St. Louis
 Charles L. Lawless, Marshall, Missouri
 Clarence Max, University Club Bldg., St. Louis
 Bernard J. Meirink, Germantown, Ill.
 Joseph A. Pettit, 610 S. W. Alder St., Portland, Oregon
 George F. Paine, 308 North 6th, St. Louis
 R. O. Raymond, Flagstaff, Arizona
 T. H. Romeiser, Medical Arts Bldg., Springfield, Missouri
 Philip H. Stephens, 1136 W. 6th, Los Angeles, Calif.
 Robert W. Stouffer, Nelson, Missouri.

From the foregoing list it can readily be seen that our classmates are widely distributed throughout the country, and this will enable each of you to intercommunicate with one another.

Needless to say the reunion was jovial and spirited. The banquet tables of both classes of 1899 were joined together, and after the banquet we reconvened in a nearby fashionable cafe to amalgamate both classes to form "*The Class of 1899.*" We toasted each other, the absentees, and the departed, and hoped that all will be present at the next Grand Reunion.

In conclusion, a resolution was adopted "to have a Grand Reunion every five years in St. Louis, and a reunion every year wherever the A. M. A. convention may be held."

F. G. Abeken, Secretary.

Class of 1904

The following twelve members of the Class of 1904 attended the Alumni Banquet held at the Jefferson Hotel on May 17:

Drs. George Kroeger, N. M. Freund, W. E. Shahan, Paul Baldwin, Robert Lischer, R. P. Scholz, D. H. Hope, Harry Jones, J. L. Evans, Joseph F. Mayes, Fred Griffin, and G. A. Kilpatrick.

We had a most enjoyable reunion. It was the first time that two of our class had been with us in 35 years; and a general round of reintroduction was necessary.

To add to the pleasure of the evening, Dr. N. M. Freund presented each one in attendance with a picture of the class taken two weeks after we entered Medical College, 39 years ago.

Many notes of regret were received; containing the following bits of news.

"I very much regret that I will be unable to attend our class reunion this week. Please give my kindest regards to all our classmates and tell them I will be thinking of them the evening of the 17th."

D. Buie Garstang,
1222 Roosevelt Bldg., Los Angeles, Calif.

"Of course, it would be a very great pleasure for me to attend the A. M. A. at St. Louis this year, and especially to be present at the class reunion. However, I fear I will not be able to get away. I wish you would remember me to all the fellows, and let me have any reports of the meeting that might be published, because, of course, I feel very much interested in every one of my classmates. If things should shape around at the last moment for me to get away, I might possibly be present."

J. H. Woodbridge,
Pueblo Medical Group Clinic, Pueblo, Colo.

"You will be surprised to know I have taken up Institutional work, but I felt, after pretty serious consideration, it might be a very pleasant way to retire. Wife and I are both employed in the above captioned institution (Institution for Feeble Minded, Apple Creek, Ohio.) Mrs. Staynor is assistant and stenographer to the chief clerk, and I am assistant to the Superintendent who is also an M.D. We get a fair salary and maintainance, very nice quarters and in new fire-proof buildings. We are pleased and happy over it all.

However Dr. Scholz I sure do regret saying to you I can not come."

I. C. Staynor.

"I am not able to be there in person. While there will be quite a few missing since the banquet of 1904, yet I know you all will have a good time.

"I hope to be in St. Louis sometime next summer and will look you up. I have been in Los Angeles since I was discharged from the army in 1919 and have been with the Veterans' Administration since that date doing nervous and mental disease work. Prior to the war I was on the staff with the State Hospital at Farmington, Mo., for about ten years. I just learned yesterday of Dr. Dickerson's death in San Diego, California."

*L. Long, Veterans' Administration,
741 N. Stanley Ave., Los Angeles, Calif.*

"I had planned to come back this year and spend a couple of weeks but the plans of mice and men often go the same way. Conditions are such that I must stay close to the political situation if I want to complete my present plans.

My very best regards to yourself and all of the old crowd and I hope for me they may turn down an empty stein, even though I cannot remember of having ever turned down one for myself."

*F. S. Marnell, M.D., Neuropsychiatrist,
State Hospital, Stockton, California.*

"Regret to advise that I have been ill for the last year and a half and have been compelled to give up my practice, however my health is improved considerably during the last two or three months, I am now able to get out and around and hope that it will be possible for me to attend the meeting of the A. M.A. If I am in St. Louis on May 17, you can count on my attending the Alumni Banquet." (And he did attend.)

J. L. Evans,

224 N. Crestway, Wichita, Kans.

A letter directed to Dr. Naokuzi Fugimori, 138 8th St., Oakland, California, was returned. It is presumed that he returned to his fatherland, Japan, and is now serving in the Army.

From the wife of our dear friend, Bill Clapper, came a letter with the following sad news:

"It is with sincere regret that I write you of William's inability to be with you all at the Alumni Banquet May 17. There is no one who would get more pleasure from the reunion if he were physically able to be there. As it is he is entirely unable to care for himself at all and goes no place but for short auto rides.

Alice B. Clapper.

In reply, those about our table wrote a letter to our dear friend Bill, signing in round table fashion.

R. P. Scholz, Secretary.

Class of 1909

For the 30th reunion of the class of '09, five out-of-town "youths" made the journey to St. Louis: Drs. Ernest P. Cayo of San Antonio, Otto Horst of Springfield, Missouri, Carey B. Elliott of New Mexico (Raton, if you must know), H. E. Kleinschmidt (tuberculosis executive from New York) and Harley Marshall of Herington, Kansas. All of these men have enviable medical records, with nary a black mark against any one of them, except perhaps an occasional parking ticket. Cayo continues as in the days of yore to be the most ingenious and versatile member of the class. He had a booth at the convention, where he demonstrated his original set of motor driven bone instruments, by means of which a button of bone can be removed from the thickest of skulls in the same amount of time it takes to trim a fingernail (definitely less than a toenail). Surgery for the orthopedists has indeed been simplified.

To prove, however, that his trip was not primarily a professional one, but one impelled by the old class spirit, he dashed off—first a few cocktails—and then in that ensuing mellow spirit, the following verses:

CLASS OF 1909

By Dr. E. P. Cayo

But yesterday we gathered here
A group of hopefuls then
The cap and gown we laid aside
To claim our place as men.

No longer now would oldsters guide
Our swiftly moving feet
Let them make way for knowing youth,
To solitude retreat.

But when tonight again we meet
We can no longer see
The youthful faces of the boys
That yesterday were we.
'Tis oldsters now with thin grey hair
And disillusioned mind
That greet each other with a smile
And feelings undefined.

The local men who made reservations for the banquet were: M. F. Arbuckle, T. P. Brookes, E. Coffin, A. A. Margulis, M. J. Press, A. Sewing, T. Taylor, S. A. Weintraub, R. S. Weiss, and L. Tuholske.

From all those mentioned herein, to those of our classmates unable to attend this year, our greetings!

“Until we met again”—’09.

Lister Tuholske.

Class of 1922

Sixteen members of the class attended the Medical Alumni Banquet on May 17: Canepa, Cady, Chamberlain, Clay, Chouke, Dieckmann, Eskeles, Hanser, Harper, Armin C. and Aphrodite Hofsommer, Walfred Johnson, Lohr, Norton, Post and Sultzman.

Letters were received from Walter B. Hoover, regretting that he could not come; from W. W. Baum, Salem, Oregon, saying that he had just returned from a trip around the world, undertaken for the purpose of getting some cataract surgery in India, and would not be able to attend the class reunion; from Lasersohn and Rice, both connected with the Withrop Chemical Company, New York, and from Kirby Martin, about to set sail for his thirtieth crossing, “to see some of Mussolini’s territory.” Walfred Johnson said that he had been for the last thirteen years with the rest of the Swedes up in Minnesota. Chouke who has held the position of assistant professor of anatomy at the University of Colo-

rado, is leaving there to take up his new post September 1 in the department of anatomy of the Graduate School of Medicine of the University of Pennsylvania.

Class of 1924

The Class of 1924 celebrated its fifteenth anniversary at the Alumni Banquet, by having fifteen members present at the table. Another classmate was also present as the President of the Alumni Association, Louis H. Jorstad. He had to sit at the head table and tried to talk over the public address system, but with difficulty, because of the hubbub.

An announcement of the meeting had been sent out to 75 members of the class, and answers were received from 26. This helped to correct numerous addresses for the Alumni Office. Interesting notes were received from some: we found out that E. W. Blatter is with the American Consulate at Naples, Italy, that John Raymond Smith is Lt. Commander (M. C.) U. S. N., U. S. S. Arctic.

We are sorry to say that three members of the class can no longer be counted among the living—Carolyn Whitney, "Frosty" Harrison, and George Kreutz.

Those present were: President Louis Jorstad, Reuben Smith, George Garrison, Nathan Womack, "Jack" Henderlite, "Jo" Gale, Carl Irick, Lloyd Miller, Perry Duncan, Henry Ulrich, Louis Herrmann, Paul Whitener, Harry Davis, L. E. Darrrough, Mary Pope, and ye olde class secretary, T. K. Brown.

On our 20th anniversary, let's have a bigger and better get-together, if not sooner. If you have any news, please send it in.

T. K. Brown.

Class of 1929

The class of 1929 celebrated its tenth anniversary in medical practice with a reunion held here in St. Louis at the time of the A. M. A.

Monday evening, May 15, 26 members gathered for a smoker at the Forest Park Hotel. Tuesday noon we enjoyed a fine dinner at the same hotel, and Wednesday night we finished up with the regular Alumni Banquet at the Jefferson Hotel.

It was particularly pleasing that everyone approached did everything possible to make the reunion a success. Several months before, a meeting of our local group of fourteen had been called and thirteen responded!

Two letters were sent to all members of the class and the response was excellent. Thirty of the class attended one or more of the reunion gatherings. Three others came to St. Louis but were unable to attend. Those attending were:

Appleberry, Boren, Dowell, Freshman, Harms, Hatchcock, Huntley, Jump, Kovitz, Lindley, R. Mueller, Pakula, Queen, Robertson, Salzman, Stuck, and the following St. Louis men: Drews, Goldwasser, Hardy, Heifetz, Horwitz, Jordan, Kleine, Macnish, Marmor, A. Mueller, Pruett, Staehle, and Treiman.

A brief directory of the members of the class is to be published in the September issue of the Quarterly. If you haven't yet written in your personal history, get it in now.

Leslie C. Drews, Class Secretary.

Class of 1934

The Five-Year Reunion of our Class of 1934 was attended by twenty-one of the ninety-one members, which is pretty good considering how far the class scattered after graduation. Many returned from far distant parts however, and it is unlikely that we shall ever again see such a large congregation of our old classmates and alumni as packed the Jefferson Hotel Gold Room on the night of May 17.

The following prodigals returned: Ed Alvis, Rip Anderson, Jim Baker, Ralph Barlow, Royce Bohrer, Gene Bricker (St. Louis, general surgery), John and Katherine Shirley Brown, Roy Culbertson (Belleville, Illinois, general practice), Luther Davis, Bill Doyle, W. W. Gist, Paul Hageman, Martin Hunter, Duke Jeffreys, Seymour Kranson, Dave LeMone (Columbia, Missouri, radiology), Stan Leydig, Fred Reynolds, Harry Rosenbaum, Keith Wilson.

In summarizing an account of the reunion it is reported that those who took a chance on entering into the festivities escaped unscathed. Those from Utah managed to get home without a single bone broken. Those from the Hoosier state have become rich plutocrats; otherwise have not changed

and still suffer from insomnia, remaining up until 4 a. m. and disgusted that their trouble isn't contagious.

The southern rebels will still defend by force: tried and not found wanting when our banquet table was invaded by other lesser classes due to shortage of places. The civil war is not over.

The St. Louisans in general are probably not as prosperous as those that went elsewhere, but their income lies are just as good and generally speaking, everybody seemed to be getting along quite successfully.

Reporter for the Self-Appointed Committee.

LOCATION FOR PRACTICE

Trenton, Ill. Town of 1200; has only one physician in practice. Methodist preferred. Communicate with Dr. C. Wesley Webdell, Barnes Hospital, St. Louis, Mo.

Colo. Alumni Form Rocky Mtn. Chapter

HONOR DR. W. N. BEGGS, '86



On Saturday night, April 8, twenty-seven Colorado alumni met for dinner at the Brown Palace Hotel in Denver to honor Dr. William Norman Beggs who graduated in 1886 from the St. Louis Medical College, now Washington University. The occasion was Dr. Beggs' seventy-seventh birthday.

Dr. George Myers, '17, called attention to the fact that this was the first gathering of Washington University Medical Alumni in Colorado ever called.

He then introduced Dr. Robert S. Liggett, '33, who briefly sketched the development of medicine in the West and the history of the St. Louis and Missouri Medical Colleges, and told of their combination to form Washington University Medical School.

Dr. George Bailey, '25, then introduced the guest of the evening, Dr. Beggs, and gave a short biography, which appears below.

Dr. Beggs rose to speak. A bit disturbed by the elaborate biographical presentation, he told Dr. Bailey that he would never trust him again. Dr. Beggs described doing the laboratory work in the office of Dr. Henry Mudd, professor of surgery of the St. Louis Medical College and the man most responsible for the merging of Missouri and St. Louis Medical Colleges. A pioneer in chest work in Denver, Dr. Beggs told also of doing what he believes was the first pneumoperitoneum in Denver, volunteered that it had been a mistake. In closing, he expressed his appreciation of the honor paid him and remarked that "he would not forget it unless he forgot a lot of other things."

Dr. Benjamin Stockett of Denver who was graduated in

the same year as Dr. Beggs, but from the Missouri Medical College, was called upon for reminiscences, and spoke on the historical background of Washington University.

Most dramatic scene of the evening was the tribute paid by Dr. Felipe Romero, '97, to Dr. Beggs whom the former had not seen since his graduation from St. Louis Medical College forty-two years ago. With much feeling, he said that Dr. Beggs was one of his beloved preceptors, that he, Dr. Romero, had been one of the first students to use the new Zeiss microscope* which Dr. Beggs had brought back from Germany. He concluded with a personal tribute to Dr. Beggs.

Remarks by Col. Edwin H. Roberts, '15, and Dr. Wm. H. Fickel, '11, ended the immediate program.

Dr. F. Craig Johnson, '33, suggested that an organization of Washington University Medical Alumni be established. Dr. Liggett's motion that the Rocky Mountain Medical Alumni be set up was discussed and carried unanimously. Dr. Liggett's name was presented for directing officer, but he requested because of amount of work he has at present that it be withdrawn. Dr. Rusk then nominated Dr. Ralph M. Stuck, '32, who was elected. It was decided to include Montana, New Mexico, Utah, Wyoming, and Colorado in the Rocky Mountain chapter if these states are willing to cooperate. No dues were assigned, but the question came up of the need for dues to be paid into the home office and the use to which the money is put.

The meeting then adjourned.

The following alumni were present: Drs. Beggs, Stockett, '86, V. T. Davis, '36, Paul C. Sheldon, '35, Wm. G. Baker, '38, James D. Morrison, '36, Sam W. Downing, '35, A. W. Freshman, '29, A. L. Esserman, '22, E. S. Auer, '24, C. L. Lincoln, '09, R. T. Terry, '33, J. H. Woodbridge, '04, Wm. D. Rothwell, '23, John B. Grow, '32, H. S. Rusk, '21, K. S. Chouke, '22, R. H. McIlroy, '35, H. H. Heuston, '19, Morris Weiner, '19, and Drs. Fickel, Romero, Roberts, Johnson, Bailey, Myers, Liggett and Stuck. Letters were read from Drs. C. A. Hadsell, '85, W. R. Collins, '84, and E. W. Reid, '01, who could not attend

* A few of these microscopes still remain in the department of anatomy and call forth expressions of wonder from the modern medical student used to the elaborate instrument in the laboratory today.

because of infirmities. Dr. Guy Hopkins, '20, was also prevented by illness from attending.

Ralph M. Stuck, '32, Director.

Dr. Beggs is one of the many outstanding alumni whom the School is proud to claim. He was born in Rolla, Missouri, in 1862, the son of a circuit-rider Methodist minister. He attended Drury College in Springfield, and in 1884 took his A.B. from Washington University.

After graduating from St. Louis Medical College (soon afterwards the medical department of Washington University) he interned at the old City Hospital. Dr. Avery Rowlette writes that he was one of seven interns on a staff which now comprises seventy-one.

In 1887 he went to Germany to study at the Christian Albrechts University in Kiel. He studied histology under Professor Walter Fleming, pathology under Professor Arnold Heller, bacteriology under Privatdocent Stabsarzt B. Fisher, assistant to Professor A. Koch in the "Cholera Expedition." While in Germany he met and married Louise Amelia Elizabeth Schmidt. In 1888 he returned to St. Louis.

During the years 1888-96, Dr. Beggs served at one time or another as instructor in bacteriology, histology and pathology at St. Louis Medical College.

Dr. Albert Taussig writes: "Dr. Beggs was instructor in histology of the St. Louis Medical School when I studied there in the early nineties. He was an inspiring teacher for those members of the class who took a real interest in the subject. Unfortunately, there was a large element in the class more interested in rough house than in medical education, and Dr. Beggs often had a difficult time with them.

"An amusing instance illustrates his attitude toward examinations. He expected much from his students and graded their paper rigidly. The result was that in an important examination, while a few men made good grades, the average of the class was in the neighborhood of 30%. Being a just man, Dr. Beggs felt that certainly the average of the class should have a passing grade, i. e., 65%. Accordingly he added 35% to each man's mark, with the result that the grades of several men exceeded 100%. But since in Dr. Beggs' opinion, no human being should be perfect in histology, the marks of

these men were reduced to 99% and it was on this basis that the final grades were handed in to the faculty. Some of the poorer students might have had a hard time of it, if it had not been for dear old Dr. Gregory who did not approve of 'these rigid young scientists' and habitually gave all of his students a rating of 100%. This saved the day for many of them.

"No pains were too great for Dr. Beggs to take in the way of helping young men who were interested in microscopy. He had a laboratory in his home and permitted a few of us to work with him there during the summer months. He had found that a certain common wood beetle had in its alimentary tract large cells that showed the process of mitosis unusually well. A number of us spent many happy hour with the doctor chasing bugs in his woodshed, bottling them and making serial sections.

"He had a somewhat gruff exterior which may have been due in part to the fact that many in his classes and also in the teaching staff did not appreciate the type of work he was doing, but in reality he was the gentlest and kindest soul imaginable. In class after class that passed through his hand, there were a great many who traced their interest in scientific medicine to the stimulus of his enthusiasm and instruction."

In 1895, Dr. Beggs who had developed pulmonary tuberculosis moved to Denver, where he became professor of Pathology and of Clinical Diseases of the Chest in the Gross Medical College. He is said to have brought some of the original histological equipment to this part of the United States. There were apparently only two microscopes in this part of the country when he came. Many of his friends remember the large microtome with which he made many early pathological sections. Dr. Beggs is believed to be the first in Denver to diagnose pneumoperitoneum by X-ray and the first to demonstrate that persons receiving pneumothorax are more likely to develop a spontaneous pneumothorax.

Active in various aspects of the life of his city, Dr. Beggs has been editor of the *Western Medical and Surgical Gazette*, a member of the staffs of the various hospitals in the city and county of Denver, a past director, president and secretary of

the Colorado State Historical and Natural History Society. His chief activity at present is that of medical director of Sands House, tuberculosis sanatorium for women, and consulting physician to the Swedish National Sanatorium.

Alumni News

Your classmates and friends like to hear about you. One way of letting them know is through the pages of this publication. If you have not sent in a report on yourself, do it today.

Dr. Amand Ravold, St. L. '81, was honor guest of the freshman class of the Missouri School of Mines, Rolla, Missouri, on April 3. Second oldest living graduate, he was the oldest alumnus present, having attended the school from 1875-77.

Dr. Robert E. Schlueter, Mo. '95, in addition to his successful labors as chairman of the committee on arrangements for the recent meeting of the A. M. A., received "Special Mention" for an exhibit (with Ethel A. Washburn) illustrating the medical history of St. Louis.

Dr. Robert J. Terry, Mo. '95, was chairman of a committee with Drs. M. D. Overholser of the University of Missouri and Dr. D. M. Schoemaker of St. Louis University, charged with the revision of the State Anatomical Law. The bill prepared by the committee has passed both houses, been signed by Governor Stark and will go into effect in September.

Dr. Mather Pfeiffenberger, '02, was recently elected president of the staff of the Alton Memorial Hospital, Alton, Illinois. He is a trustee of the Inter-State Post-Graduate Association of North America, past president of the Illinois State Medical Society, and the father of seven children.

Dr. Buford G. Hamilton, '05, assistant professor of obstetrics and gynecology, University of Kansas Medical School, and Dr. Edward H.

Hashinger, professor of medicine, were recently initiated into the School's chapter of Alpha Omega Alpha.

Dr. Charles F. DeGaris, '12, with Ernst Lachmann, M.D., and Ralph E. Chase, A.M., is the author of "Principles of Human Anatomy with Synopses and Bibliography." 12mo., 239 pages. Cloth, \$2.50. Lea and Febiger. Phila., 1939.

Dr. G. J. Thompson, '25, with Drs. E. N. Cook and J. L. Emmett, Mayo Foundation, was the recipient of "Special Mention" for an exhibit illustrating transurethral surgery at the meeting of the A. M. A.

Dr. H. Veazie Markham, '26, interned at Henry Ford Hospital, Detroit, graduated from the School of Tropical Medicine, Lisbon, Portugal, and served as the medical director of the Dondi Mission Hospital, Angola, Africa from 1929-38. Having returned to this country last July, he spent some time as a voluntary assistant in thoracic surgery, University of Chicago, and now plans to enter practice here. He has three children. His present address is 14 Beacon Street, Boston, Massachusetts.

Dr. Pendleton S. Tompkins, '31, 807 Spruce St., Philadelphia, took four years of training at the University of Pennsylvania Hospital, is now engaged in the practice of obstetrics and gynecology. His engagement to Miss Louise Mertz of Philadelphia was announced in April.

Dr. James Wm. Bagby, '33, Metropolitan Bldg., St. Louis, is associated with Dr. Clinton Lane in the practice of dermatology. Was mar-

ried to Miss Eugenia Busch of Belleville, Illinois, June 17.

Dr. Russell J. Blattner, '33, was recently married to Miss Marion Koeneké, sister of Dr. Irene Koeneké, '27 (in private life, the wife of Dr. Arthur E. Hertzler, of Halstead, Kansas, who wrote "The Horse and Buggy Doctor") Dr. Blattner is a member of the department of pediatrics of Washington University School of Medicine.

Dr. Morrison Schroeder, '33, was resident in surgery last year at Louisville City Hospital, plans to enter private practice. He attended the A. M. A. meeting in May. At last report, unmarried.

CLASS OF 1934

Helen Aff, 1927a N. Union, St. Louis; interested in pediatrics; married to Dr. C. G. Drum, July 2, 1938.

E. B. Alvis, Carleton Bldg., St. Louis; specializing in ophthalmology; married to Helen E. Pickard, August 1, 1935.

R. M. Anderson, 316 Main, Vincennes, Indiana; specializing in surgery; married to Peggy Joyce.

Vern Anderson, 112 Broadway, Buhl, Idaho; married to Lorna Ence, September, 1936.

James M. Baker, 16 S. 10th, Columbia, Missouri; interested in surgery; married to Margaret Ellen Brewer, August 11, 1935.

Ralph N. Barlow, Budge Clinic, Logan, Utah; specializing in pediatrics; "still looking for a rich widow."

Carl Birk, 1452 W. Riverview, Decatur, Illinois; interested in ob. and gyn.; married to Martha Sue Sublette, November, 1936. One child.

Edward R. Bohrer, 111 West Main, West Plains, Missouri; inter-

ested in surgery; married to Lois Wood, September, 1935.

G. B. Bowers, Stonega, Virginia; general practice; married to Clara Marsh, 1933.

John J. and Katherine Shirley Brown, Fulton, Missouri; one child (at last report).

Leonard F. Bush, Geisinger Hospital, Danville, Pennsylvania; specializing in general surgery; married Jean B. Hill, June, 1936.

T. C. Campbell, 1128a Hamilton, St. Louis; interested in anesthesia; married Dorothy L. Mayne, August, 1935.

Luther Davis, Jr., Tuscaloosa, Alabama; surgery; married Angela Pagenhardt, April, 1937.

William H. Doyle, Fite Clinic, Barnes Bldg., Muskogee, Oklahoma; specializing in dermatology and syphilology.

Frank R. Drake, Plattsburg Barracks, New York; interested in internal medicine; married Eleanor Van Cise July, 1937. 1st lieutenant, M. C., U. S. Army.

Ben Pat Frissell, Professional Bldg., Phoenix, Arizona; internal medicine; married Harriet Eyer, September, 1937.

W. Wilmot Gist, 927 Argyle Bldg., Kansas City, Missouri; married Genevieve Howell, November, 1938.

A. J. Gumper, Dickinson, North Dakota; internal medicine; married Cecile Shinnick, August, 1937.

Paul Hageman, 1018 Claytonia Terrace; specializing in internal medicine; married Nancy Powell, 1935; 1 child.

E. Hammonds, 315 Wabeek Bldg., Birmingham, Michigan; interested in internal medicine; married Lizanne Ustick, 1935.

Stanley Hampton, Roosevelt Hos-

pital, New York City; specializing in allergy.

Charles J. Hedlund, Atwater, Minnesota; general practice; married Blanche Burroughs, June 4, 1938.

G. W. Hendren, Liberty, Missouri; general practice; married Anne Hines, 1924; two boys, Tom 3, Joe 2.

Martin P. Hunter, Moberly, Missouri; internal medicine; married Dorothy Schlueter, April, 1937.

Everett O. Jeffreys has appointment and affiliation with the Medical College of Virginia and Allied Hospital, Richmond, Virginia, in the department of neurosurgery, beginning July 1.

Louis G. Jekel, 926 E. McDowell Road, Phoenix, Arizona; specializing in dermatology; married Margaret Roark, 1933; daughter, Judy, September, 1938.

Ralph R. Jones, First National Bank, Boise, Idaho; surgery; married; children.

Seymour J. Kranson, 604 W. Maple Ave., Independence, Missouri; pediatrics; married Elizabeth Harwich (A.B., Washington University, 1929) June, 1930; daughter, Kathryn Bea.

Paul Kunkel, Boston City Hospital, (after Sept. 1, Boston Lying-In Hospital, Boston) specializing in internal medicine with special interest in cardio-vascular diseases.

Arthur Lesser, 2 W. 89th Street, New York City; pediatrics.

Stanley M. Leydig, 1652 S. Grand, St. Louis; specializing in orthopedics and fractures; married Lola Wylder.

Howard L. Little, Gibsonville, North Carolina; general practice; married Elizabeth Jordan, September, 1935.

W. H. McKenzie, Medical Arts Bldg., Fort Worth, Texas; specializing in eye, ear, nose and throat.

Alva Edward Miller, State Hospital, St. Joseph, Missouri; specializing in psychiatry; married Louise Caughey of St. Louis, June, 1937.

Paul Moss, 2008 Bryant Bldg., Kansas City, Missouri; general medicine.

John M. Nelson, 904 Republic Bldg., Denver, Colorado; pediatrics; married Marion Gray, 1931.

W. E. Patton, 2011 Louisiana, Little Rock; specializing in internal medicine; married, 1934.

G. A. Rawlins, 1917 Beall St., Alton, Illinois; specializing in eye, ear, nose and throat; married Ann Haag, 1933; one boy, 18 months.

Fred C. Reynolds, 320 North Meridian, Indianapolis, Indiana; surgery.

Jean F. Rogier, Christiansted, St. Croix, Virgin Islands, U. S. A.; specializing in surgery; married Verna Smith, 1937.

Harry D. Rosenbaum, 900 Carleton Bldg., St. Louis; specializing in ophthalmology; married Evelyn Levy, June, 1938.

E. S. Sanderson, University of Georgia School of Medicine, Augusta, Georgia; professor of bacteriology and public health and chairman of department; married Edith B. Shilitto, August, 1921.

John A. Saxton, Jr., Cornell Medical School, New York City; specializing in pathology with special emphasis on pathology of senility; married Stella M. Switzer, December, 1936.

Edna W. Schrick, Allen Hospital, Oberlin, Ohio; specializing in student health work.

C. E. Stindel, 3651 Grandel Square, St. Louis; specializing in anes-

thesia; married Dorothy Hoelscher, October, 1935.

James B. Telfer, American Consulate, Hong Kong, China; married Margaret Baldwin, March, 1938.

Leon B. Thomas, Windsor Apartments, Tillamook, Oregon; ob. and gyn.; married Ruth Henderson, June, 1934.

Corinne Westphal, Jefferson Davis Hospital, Houston, Texas; specializing in anesthesia.

Dr. V. Terrell Davis, '36, Colorado Psychopathic Hospital, Denver, Colorado, will have as his address U. S. Public Health Service Hospital, Fort Worth, Texas, after September 1. Married to Mary E. Hooper, December, 1936.

Dr. John F. Dillon, '36, is in the practice of obstetrics and gynecology in Alexander City, Alabama.

Dr. R. H. Donnell, '36, Crystal City, Missouri, is doing general practice.

Dr. Henry W. Edmonds, '36, Dr. Dorothy Gill, '38—Baltimore license 32877, June 23, 1939.

Dr. Stephen Ellis, '36, 610 N. 9th, Oklahoma City, Oklahoma, is doing general and plastic surgery. Married.

Dr. Harry Hauptman, '36, on the house staff of Barnard Skin and Cancer Hospital last year, will be an assistant in the department of obstetrics and gynecology at Washington University School of Medicine for the coming year.

Dr. Hyman Jaffe, '36, 5388 St. Clair, Cleveland, Ohio, is in general practice.

Dr. Nathan Kahn, '36, is specializing in pediatric neuropsychiatry. His address after July 1 will be

Emma P. Bradley Home, Providence, Rhode Island.

Dr. Marshall Kelly, '36, will be resident in surgery for the coming year at the St. Louis City Hospital.

Dr. T. Wilson McVety, '36, Citizens Bank Bldg., Decatur, Illinois, is specializing in obstetrics and gynecology. Married Lena Arnold, June, 1936.

Dr. James D. Morrison, '36, can be reached after July 1 at the Hart Albin Bldg., Billings, Montana. His specialty is ophthalmology. Married.

Dr. John W. Records, '36, is specializing in obstetrics and gynecology. His address is 301 W. 12th St., Oklahoma City. Married.

Dr. Robert H. Rutherford, '36, is at Pottenger Sanatorium, Monrovia, California. Married Dorothy Dickey December, 1937.

Dr. Alexander Silverglade, '36, Stowe Lipsett Clinic, Oakland, California, is specializing in internal medicine with emphasis on peripheral vascular disease. Married, has baby girl six months old.

Dr. Michael Wepprich, '36, Union, Missouri, is in general practice. Married Mary C. White, June 16, 1936.

Dr. Warren B. West, '36, City Hospital, St. Louis, is specializing in radiology. Married Olive Dover, April 17, 1938.

Dr. William R. Young, '36, University of California Hospital, San Francisco, is specializing in pediatrics and has a special residency appointment. Married Wilma Hanson September, 1935. They have one baby girl, born February 6, 1939.

Dr. Harry Baers, '38, is located at the St. Louis Training School, St. Louis.

In Memoriam

- Bransford Adelsberger, '20, Peoria, Illinois. Died May 9, while performing a surgical operation.
- Lemuel Alfred Anthony, Mo. '91, Rio Vista, California. Veteran of the World War. Died February 11, aged 70.
- Henry S. Brookes, St. L. '84, St. Louis. Clinical Professor of Medicine, Washington University, 1906-1911. Father of Theodore P. Brookes '09 and Henry S. Brookes '17. Died May 16.
- Fred S. Brown, Mo. '93, Oklahoma City. Died January 16, aged 65.
- William M. Campbell, Mo. '90, Tulsa, Oklahoma. Died April 22.
- William L. Clapper, '04, St. Louis. Died August 5, aged 62.
- Glenwood Medcalfe DeLisser, '97, Tupper Lake, New York. Died March 7, aged 65.
- Samuel W. Downing, Mo. '94, Salem, Missouri, died December 9, 1938, aged 68.
- James M. Elliott, Mo. '86, Ogden, Utah. Died December 27, 1938, aged 83.
- Vernon S. Fildes, '05, Olney, Illinois. Died February 4, aged 57.
- Jacob C. Fults, St. L., '85, Waterloo, Illinois. Died January 30, aged 77.
- Theophilus E. Hinshaw, Mo. '82, Winfield, Kansas. Trustee of Southwestern College for many years. Died December 23, 1938, aged 80.
- Phil Hoffmann, Mo. '92, St. Louis. Professor emeritus of orthopedic surgery, St. Louis University School of Medicine. Died April 27.
- George Knowlton Janes, Mo. '84, Williamsburg, Kansas. Died February 17, aged 78.
- William Lages, Mo. '91, Fredericktown, Missouri. Died December 19, 1938, aged 76.
- Aaron Levy, Mo. '97, St. Louis. Died June 18, aged 63.
- Oscar N. Lightner, '05, Laredo, Texas. Served during World War. Died February 4, aged 57.
- Ephraim G. McCormick, Mo. '81, Prairie Grove, Arkansas. Died December 12, 1938, aged 83.
- Joseph H. McGauhey, Mo. '88, White Cloud, Kansas. Died February 8, aged 77.
- Jerome C. McNeas, Mo. '85, Ardmore, Oklahoma. Died December 14, 1938, aged 76.
- Herman L. Nietert, St. L. '89, St. Louis. Superintendent of City Hospital 1899-1903. Believed to be the first surgeon in America to suture a heart to relieve pressure of blood in pericardium caused by a knife wound in the cavity of the ventricle. Died May 8, aged 73.
- Nicholas B. Pautler, Mo. '93, Waterloo, Illinois. Died July 18, aged 67.
- Herman F. Ratte, Mo. '86, Los Angeles, California. Died November 21, 1938, aged 74.
- Henry W. Schulz, St. L. '88, St. Louis. Died February 10, aged 70.
- Clarence A. Wells, Mo. '97, Quincy, Illinois. Died January 15, aged 68.

Students

The annual Senior-Faculty dinner was held at the Forest Park Hotel on Friday evening, May 26, 1939. Needless to say there was a hundred percent attendance on the part of the guests, the Seniors, and the presence of over 125 faculty members made the occasion quite a festive one. Although the food was excellent, the true *pièce de resistance* was the skit of faculty members put on by the Senior class. Only a few members of the faculty escaped the witticisms that were vividly portrayed by members of the Senior class who had unsuspected talent. Several members of the faculty were accorded the questionable privilege of rebuttal in the form of a few helpful but pithy remarks. This skit which lasted some 45 minutes was followed by some a-cappella singing that was loud and joyous if not particularly harmonious. The party drew to a close at 10:30 P. M. and everyone present voted that they had had a beery good time.

1939 INTERN APPOINTMENTS

Ackerly, Roscoe H., Colorado General Hospital, Denver, Colorado.
 Ahrens, John H., Barnes Hospital, St. Louis, Missouri.
 Anderson, Charles R., *Barnes Hospital, St. Louis, Missouri.
 Barham, B. Francis, Watts Hospital, Durham, North Carolina.
 Basham, George L., Charity Hospital of Louisiana, New Orleans.
 Baumgarten, Walter, Jr., St. Luke's Hospital, St. Louis, Missouri.
 Baur, Alfred K., Barnes Hospital, St. Louis, Missouri.
 Beasley, Louis K., St. Luke's Hospital, St. Louis, Missouri.
 Berger, Irving, Cleveland City Hospital, Cleveland, Ohio.
 Berman, Benjamin, St. Louis City Hospital, St. Louis, Missouri.
 Bernard, William R., De Paul Hospital, St. Louis, Missouri.
 Bierman, Howard, Barnes Hospital, St. Louis, Missouri.
 Blair, Vilray P., Jr., Barnes Hospital, St. Louis, Missouri.
 Blum, Leo J., Jr., James Jackson Memorial Hospital, Miami, Florida.
 Bohne, Arthur W., St. Louis City Hospital, St. Louis, Missouri.
 Borenstine, Joseph, St. Louis City Hospital, St. Louis, Missouri.
 Boyers, Sidney, North Hudson Hospital, Weehawken, New Jersey.
 Brakel, Carl A., Albany Hospital, Albany, New York.
 Brockbank, Mark, St. Mary's Group of Hospitals, St. Louis.
 Brown, Wilson G., Barnes Hospital, St. Louis, Missouri.
 Burbidge, Earl L., St. Louis City Hospital, St. Louis, Missouri.
 Campbell, Harry B., Union Memorial Hospital, Baltimore, Maryland.
 Canepa, Edward G., St. Louis City Hospital, St. Louis, Missouri.
 Cockett, Patrick M., St. Louis City Hospital, St. Louis, Missouri.
 Corgill, Donald M., Henry Ford Hospital, Detroit, Michigan.
 Cron, Heinz E., De Paul Hospital, St. Louis, Missouri.

* Fellowship.

- Crutcher, Luke F., Jr., Los Angeles County General Hospital, Los Angeles, California.
- Dameron, Edward O., Missouri Baptist Hospital, St. Louis, Missouri.
- Dix, John W., St. Luke's Hospital, St. Louis, Missouri.
- Dodds, Donald C., Alameda County Hospital, Oakland, California.
- Douglas, Paul L., Ohio Valley General Hospital, Wheeling, West Virginia.
- Douglas, Thomas H., St. Joseph Hospital, Kansas City, Missouri.
- Eckert, Charles L., Barnes Hospital, St. Louis, Missouri.
- Elsworth, John N., Iowa Methodist Hospital, Des Moines, Iowa.
- Epstein, Carl C., St. Louis City Hospital, St. Louis, Missouri.
- Fleming, Ruth, Children's Hospital for Women and Children, San Francisco, California.
- Foseid, Oscar F., Ancker Hospital, St. Paul, Minnesota.
- Foster, Miles E., Jr., Geo. F. Geisinger Memorial Hospital, Danville, Pennsylvania.
- Fox, Leon J., Jewish Hospital of St. Louis, St. Louis, Missouri.
- Fraser, George F., St. Louis City Hospital, St. Louis, Missouri.
- Fraser, Richard S., St. John's Hospital, St. Louis, Missouri.
- Geppert, Leo, St. Louis Children's Hospital, St. Louis, Missouri.
- Graham, John G., Jr., St. Louis City Hospital, St. Louis, Missouri.
- Greeley, Robert H., Research Hospital, Kansas City, Missouri.
- Hall, John R., Jr., St. Louis City Hospital, St. Louis, Missouri.
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- Hardaway, Robert M., New York Hospital, New York City, New York.
- Harrell, Julius G., St. Luke's Hospital, St. Louis, Missouri.
- Helm, John E., St. Louis City Hospital, St. Louis, Missouri.
- Hess, George J., St. Louis City Hospital, St. Louis, Missouri.
- Hildebrand, William B., Washington University School of Medicine, St. Louis, Missouri (Dept. Pathology) until January 1, 1940; Minneapolis General Hospital, Minneapolis, Minnesota.
- Hoover, Robert A., St. Louis City Hospital, St. Louis, Missouri.
- Inderlied, Herman F., Barnes Hospital, St. Louis, Missouri.
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- Jacobson, Leonard, St. Louis City Hospital, St. Louis, Missouri.
- Johnston, P. Rich, St. Louis County Hospital, Clayton, Missouri.
- Jones, Sam, Hillman Hospital, Birmingham, Alabama.
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- Keys, Edgar H., Jr., St. Luke's Hospital, St. Louis, Missouri.
- Kuhlmann, Raymond F., University Hospitals, Ann Arbor, Michigan.
- Lamar, Robert F., Kansas City General Hospital, Kansas City, Missouri.
- Latham, Kenyon, Deaconess Hospital, St. Louis, Missouri.
- Maxwell, Reuben J., St. Louis City Hospital, St. Louis, Missouri.
- McElroy, West G., King County Hospital, Seattle, Washington.
- McMahon, John R., General Hospital of Fresno County, Fresno, California.
- Melick, William F., St. Luke's Hospital, St. Louis, Missouri.
- Milder, Benjamin, Jewish Hospital of St. Louis, St. Louis, Missouri.
- Mullen, Aloysius, St. Francis Hospital, Hartford, Connecticut.
- Neubauer, Darwin, University of Virginia, University, Virginia.
- Nuttall, Leonard W., St. Louis City Hospital, St. Louis, Missouri.
- Passanante, Bartholomew, St. Louis County Hospital, Clayton, Missouri.
- Proud, G. O'Neill, St. Luke's Hospital, Kansas City, Missouri.
- Reinhard, Edward, New York Hospital, New York City, New York.
- Ritter, Morton, Atlantic City Hospital, Atlantic City, New Jersey.
- Robinson, Donald W., St. Louis City Hospital, St. Louis, Missouri.
- Roper, Stanley, St. Louis City Hospital, St. Louis, Missouri.
- Rossow, Russell, St. Louis County Hospital, Clayton, Missouri.
- Senne, Herbert, U. S. Marine Hospital, Seattle, Washington.

Shank, Robert E., Barnes Hospital, St. Louis, Missouri.
 Skinner, John T., St. Joseph Hospital, Kansas City, Missouri.
 Slusser, Gerald, Washington University School of Medicine, St. Louis, Missouri (Dept. of Pathology).
 Smith, Hugh R., Jr., Lutheran Hospital, St. Louis, Missouri.
 Starkloff, Gene R., Barnes Hospital, St. Louis, Missouri.
 Thoma, John, Deaconess Hospital, St. Louis, Missouri.
 Tigert, Allen H., St. Louis City Hospital, St. Louis, Missouri.
 Towers, Orville, Deaconess Hospital, St. Louis, Missouri.
 Wallace, Samuel H., St. Louis City Hospital, St. Louis, Missouri.
 Weaver, Jerome A., Charity Hospital of Louisiana, New Orleans, Louisiana.
 Welch, Arnold, Instructor in Pharmacology, Washington University School of Medicine, St. Louis, Missouri.
 White, Charles O., St. Luke's Hospital, St. Louis, Missouri.
 Whitfield, Fred S., Jr., Charity Hospital of Louisiana, New Orleans, Louisiana.
 Woll, Maurice, St. Louis City Hospital, St. Louis, Missouri.
 Zander, Ernst, Barnes Hospital, St. Louis, Missouri.
 Zillgitt, George, Deaconess Hospital, St. Louis, Missouri.

SCIENCE DEGREES CONFERED AT COMMENCEMENT FOR GRADUATE WORK IN THE SCHOOL OF MEDICINE

BACHELOR OF SCIENCE IN MEDICAL SCIENCE

Howard Richard Bierman, Leon Julius Fox, Gerald Adelbert Slusser.

MASTER OF SCIENCE IN BIOLOGICAL CHEMISTRY AND CHEMISTRY

Sidney P. Colowick, B.S., Washington University.

DOCTOR OF PHILOSOPHY IN ANATOMY; ZOOLOGY

Raymond Ray Lanier, Jr., A.B., University of Richmond. Title of Thesis: The Pre-Sacral Vertebrae of American White and Negro Males.

DOCTOR OF PHILOSOPHY IN BACTERIOLOGY; BIOLOGICAL CHEMISTRY

Jane Isabella Burns, B.S., University of Washington; M.S., *ibid.* Title of Thesis: Tuberculo-protein Hypersensitivity in Its Relation to the Tuberculin Allergy of Infection.

George Maurice Kalmanson, B.S., The College of the City of New York; M.S., University of Illinois. Title of Thesis: Studies on the Purification of Bacteriophage.

DOCTOR OF PHILOSOPHY IN BACTERIOLOGY; PATHOLOGY

Simon Edward Sulkin, B.S., Rhode Island State College. Title of Thesis: On the Nature of the Ramon Flocculation Reaction.

PRIZES AND HONORS

FINAL HONORS IN THE SCHOOL OF MEDICINE

Joseph Borenstine; Harry Bryant Campbell, A.B., B.S.; Charles Leonard Eckert; Leo Joseph Geppert, A.B., A.M.; Robert Morris Hardaway III, A.B.; Herman Frederick Inderlied; Darwin William Neubauer, A.B.; Edward Humphrey Reinhard, A.B.; Robert Ely Shank, A.B.; Arnold DeMerritt Welch, B.S., M.S., Ph.D.; Ernest Zander.

PRIZES IN THE SCHOOL OF MEDICINE

George F. Gill Prize in Anatomy: Charles B. Mueller, '42.
 George F. Gill Prize in Pediatrics: Charles Roy Anderson, '39.
 Alpha Omega Alpha Book Prize: Darwin William Neubauer, '39.

SCHOLARSHIPS

JACKSON JOHNSON SCHOLARSHIPS

To members of the Class of 1941

Roy E. Ahrens, Jr.	Gordon S. Letterman	Vergil Slee
	Souther Tompkins	

To members of the Class of 1942

William M. Anderson	Frances Love	William G. Reese
Frank A. Brown, Jr.	Charles R. Mueller	Philip T. Shahan
Charles M. Huguley		Martin S. Withers

To members of the Class of 1943

Parker R. Beamer	Allyn McDowell	James A. Read
Grace Bergner	Kent McQueen	Ernest Rouse
Edward Dunn		Gordon Todd

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ELIZA McMILLAN SCHOLARSHIP

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ROBERT ANDRES ROBLEE SCHOLARSHIPS

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ELECTIONS TO HONOR SOCIETIES

ELECTIONS TO ALPHA OMEGA ALPHA

Fourth Year Students: Charles L. Eckert, Herman Inderlied, Robert Shank, Arnold Welch, Alfred K. Bauer, Benjamin Berman, Benjamin Milder, Irving Berger.

Transfer Students: Leo Geppert, Harry Campbell, Robert Hardaway, Jr., Ernst Zander.

Class of 1940: Leo A. Sachar, James Growdon, Margaret Huntington.

ELECTIONS TO SIGMA XI

Sidney P. Colowick, Raymond Lanier, Jr., Jane I. Burns, George M. Kalmanson, Gerhard Schmidt.

* This year, for the first time, the Medical Alumni Association awarded instead of the usual one, two scholarships of \$100 each.

Letters

The Valley Home Farm,
Jackson, Mo., May 7th, 1939.

Dear Doctor Jorstad:

Your kind invitation to the Medical Alumni Banquet to be held at the Jefferson Hotel on May 17th, 1939 was received. It would afford me great pleasure to be with you on that happy occasion if circumstances would permit. Senile decrepitude and the infirmities of advanced age compel me to forego that distinct pleasure.

I am now pushing the nineties and the old machine is slipping the cogs; I am very deaf and almost blind.

I enjoyed the pleasure of an Alumni Banquet at the Jefferson some years ago and three members of my class were there. (Mo. Med., 1875). Mr. Brookings and other dignitaries of Washington University were also present. We had a very enjoyable meeting on that occasion. It lingers in my memory even unto the present day.

I am curious to know how many members of my class (Mo. Med., 1875) will be present at the coming meeting, May 17th, 1939. I regard Washington University as my legitimate step-mother, and my relationship to that respected institution that of a step-child, yet I appreciate the lineage.

With sincere good wishes for the success and prosperity of the Alumni Association, I am,

Respectfully,
G. W. Vinyard.

Carrollton, Mo.
April 26th, 1939.

Dr. Louis H. Jorstad, President,
St. Louis, Mo.

Dear Doctor:

In re- to your favor 20th. inst. relative to the Alumni banquet permit me to say that I am planning to attend the A. M. A. meeting and of course should I be in the city I shall certainly attend the banquet. Some years ago I attended at the Jefferson hotel with my class of 1887. Most of these men have

passed on but I am glad to say I am still on the job and enjoyed the Excelsior Springs meeting and in helping to elect Dr. Burford as president. I am very well acquainted with him being associated upon a board. I regret I was unable to attend a special fifty year gold meeting that was proposed two years ago. Of course it is just a little early to state positively but I herewith place myself on record as expecting to attend.

Courteously,

C. S. Austin.

Washington University

George R. Throop, Ph.D., LL.D., Bridge Chancellor

Walter E. McCourt, A.M., Assistant Chancellor

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 - IX. **The School of Dentistry** (4559 Scott Avenue)
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 - XIII. **The Summer School** (Skinker Road and Lindell Boulevard)
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-

The following school is also conducted under the charter of the University:

Mary Institute—A Preparatory School for Girls
(Ladue and Warson Roads)

Charles H. Garrison, A.B., Principal

¹ Resigned December 16, 1938.

² Effective December 16, 1938.

THE WASHINGTON UNIVERSITY MEDICAL ALUMNI QUARTERLY

Vol. II

July, 1939
Completing Volume Two

No. 4

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WASHINGTON UNIVERSITY

ST. LOUIS, MISSOURI