

PROGRESS IN EDUCATION

Great Value of Recent Tests Into the Brain Power of Children.

LIMITED POWER OF CONCENTRATION

Progress of Women in the Management of Schools and Colleges—Noted Educational Leaders of the Sex.

How much happier the lives of the thousands of children entering school this month would be if only women—mothers and teachers—better understood the nature and limitation of their brain cells. Such knowledge is to be had, as very important experiments and deductions have recently been made by scientific investigators; but it always takes an unreasonable length of time for such knowledge to become general.

After 25,000 tests by the best educators in America, it has been absolutely demonstrated, for instance, that the length of time the mind does not exceed seven minutes, and that all efforts to refine its action upon one subject beyond this time are useless. This power of concentration increases slowly; at the age of 8 a child's attention may be easily held ten minutes. At the age of 12 his mind should not be riveted upon one subject longer than seventeen minutes. It is, therefore, a great mistake to keep a child of this age—say at the piano, more than fifteen minutes; after a change of occupation, another quarter of an hour's practice will be of incalculably more benefit than the attempt to continue work after brain and nerves have become fatigued.

Indeed, most of the inattention and restlessness of children may be explained upon the physical basis. A boy's brain, for example, undergoes a certain shrinkage at the age of 14 or 15. It actually weighs less than at the age of 12 and 13. This fact explains the carelessness, laziness and general unreasonableness of boys of this age. Statistics show that a large proportion of boys leave school at about this time. It is altogether probable that if parents and teachers realized that the proverbial lawlessness of boys of 14 merely evidenced a temporary condition of brain cells, more of them would be patiently guided through the period, to take up the studies a year or two later with renewed interest.

The same tests have conclusively proved that the brain of a child is always most active between 8:30 and 11:30 in the morning. All lessons, therefore, requiring the exercise of their reasoning power—such as arithmetic and grammar, should be at this hour. It has been further deduced that the average child, unhampered by grades and systems, may have easily mastered his arithmetic by the time he is 12 years old.

Scientists have also discovered that if the brain centers governing the motor nerves remain undeveloped until the age of 18, there is no chance whatever of any later development, which fact is a powerful argument in favor of manual training in the public schools. The majority of children are so active that they develop their own brains and nerves to a certain extent along these lines. Where they fail to do so we get the tramp and the sloven. It is a physical impossibility to acquire skill and dexterity in any art unless the foundation has been laid in the formation of brain cells and the training of the motor nerves before the age of 16.

Leading Feminine Educators.

The average man in middle life in recalling his school days will readily remember how completely the male sex monopolized the profession of teaching. They were lords of the birch and the bench. Here and there one of the gentler sex was tolerated, usually in a minor position. Now these conditions are practically reversed. Men have been relegated to the rear in nearly all the common schools. A few of the male persuasions are permitted to hang on, merely as a reminiscence of the past. Nor is the feminine invasion confined to the common schools. It comprehends the higher levels of education and is securely entrenched in a large number. How far they have advanced controlling and managing colleges is shown in a late number of Harper's Bazaar, from which the following extracts are taken:

Dean of Chicago.

The University of Chicago has from its beginning showed itself the splendid educational center its name implies, and its crowning glory is the fact that it makes no slight difference whether the student is a man or woman, all privileges are open to both alike. To add to her dean of women in such a seat of learning is no small honor, and when Miss Julia E. Bulkley, Ph.D., was appointed to that position it was felt that the distinction was justly deserved. As professor of pedagogy in the university, and as head of Beecher hall, she has been the recipient of more honors, and hers is a very active life in many directions. Born in Danbury, Conn., she early displayed her scholarly turn of mind, and has always been enabled to follow out her desires, studying at the best institutions, both here and on the other side of the Atlantic. Her degree of Doctor of Philosophy was received after three years of study at the University of Zurich.

As warden of Sage Hall, Cornell university, Miss Louise Sheffield Brownell, Ph.D., a Bryn-Mawr graduate, has opportunity to enter into the life of the young students, and as lecturer on English literature she becomes the first woman placed in a position to teach the men of Cornell. Although young in both years and appearance, Miss Brownell in her one season of office has proved so efficient that all fears have been dispelled as to her youth and lack of experience. Here is a remarkable record in scholarship, as she entered Bryn-Mawr on the first Harvard scholarship, in 1883, awarded to the female student standing highest in the Harvard examinations held in New York. On graduating she was awarded the Bryn-Mawr European Fellowship, and on it studied in Oxford and the University of Leipzig, devoting additional time to work in Greece and Italy. On her return she studied at Columbia as a graduate student of Barnard, and later she went back to Bryn-Mawr to complete her course for the Ph.D. degree. Miss Brownell is a native of New York City, her father being the eminent lawyer, Silas B. Brown.

California School Strike.

One of the most able and representative women in college circles is Miss M. Carey Thomas, Ph. D., LL. D., president of Bryn-Mawr, who combines the deep thinker, the close student and the indomitable will which pushed forward to scholarly achievement in the face of all obstacles. Her mother was a Philadelphiaan, daughter of the well-known Mr. John M. Whittall, but her father's home was Baltimore, and there she passed her girlhood, preparing for college with a private tutor, as the native city then boasted no school where a girl could be prepared for such a course. Graduating from Cornell university, she pursued graduate work at Johns Hopkins university and then went abroad to continue her study at the universities of Leipzig and Zurich, at which latter she received the highest degree possible, that of Doctor of Philosophy summa cum laude, the first time it had even been conferred upon any woman. Not satisfied with her honors, she entered the Sorbonne at Paris and also the Collège de France for the study of old French. Soon after her return home she was elected dean of the faculty at Bryn-Mawr college, and in 1895, having been appointed its president, she first entered upon her official duties in that capacity, in which unbound success has attended her from the start, the secret of which may be explained by the words of a friend: "She is an admirable self posse, a quick eye to the whole of what is subject as well as individual parts and united to a kind and generous nature, born with the added charm of a gracious manner and a dignified bearing. She is the efficient and wisely discriminating teacher, the profound scholar, the ready writer and fluent conversationalist."

Mount Holyoke college has gradually evolved from the seminary founded by Mary Lyon over sixty years ago to its present high position in the college world, and much of its recent advancement is undoubt-

edly due to the intelligent guidance of its president, Mrs. Elizabeth Storrs Mead, who united modern learning and culture with profound religious spirit, a winning personality and much practical good sense. Of the old New England stock—the Mathers, Williamses, Willistons, Storts and other colonial families being her ancestors—it is a native of Massachusetts and was educated in the seminary at Ipswich founded by Mary Lyon, and there forged the first link to bind her in after years to Mount Holyoke. She has always followed her natural bent as a teacher, before and after her marriage to the Rev. Hiram Mead, professor in the Oberlin Theological seminary. After his death she taught at Oberlin college and traveled extensively abroad, being in Rome when the news of her appointment to the presidency of Mount Holyoke college reached her. Especially fond of mental and moral philosophy and aesthetics, her elevating standards of all things in life have made her influence over the young women coming under her charge a refining and enabling one.

Miss Helen Fairchild Smith, dean of Wells college, though not a college-bred woman, has received recognition of her scholastic attainments by the universities of Syracuse and Wisconsin, which have conferred upon her the degrees of M. A. and L. H. B. The daughter of the distinguished educator and metropolitologist, Prof. Augustus W. Smith, LL.D., her mother's side comes from a long line of patriotic progenitors. The social welfare and the moral and religious well-being of the students are a part of her daily outlook.

A Progressive Pair.

Radcliffe and Barnard, the two affiliated colleges with Harvard and Columbia universities, have at their heads two women of acknowledged superiority, though widely differing from each other in personality and training. Miss Agnes Irwin, dean of Radcliffe, is not a college woman, but has the broad point of view and the charms of manner gained by years of application and research in educational fields, by contact with scholars, men of national prominence, and women of highest social environment; by foreign travel, and by years of experience in the ranks of Philadelphia's leading private schools. A member of a noted family with generations of famous citizens, Miss Irwin personifies in herself the aims of gentle breeding, largeness of heart and firm mental poise.

Miss Emily James Smith, dean of Barnard, is a graduate of Bryn-Mawr college, and has done graduate work abroad and at the University of Chicago.

Oberlin was the first college to practice coeducation, and Mrs. Adelia A. F. Johnson, dean of the woman's department and professor of mediaeval history, was the first woman to hold a professorship therein. So ably has she filled this chair that she has inspired the trustees and other friends of the college to raise the sum of \$50,000 to found a permanent chair, to be named the Adelia A. Field Johnston Professorship, whose incumbents shall always be a woman. Born in Ohio, she graduated at Oberlin, and two years later married, but being soon left a widow, took up her profession of teaching, to which service she has given her years unceasingly except for a period spent in foreign study. She is widely known in educational circles as one of the most scholarly women in the country, and is philanthropic as well, having been instrumental in adding largely to the beneficiary funds of the college. Her power to arouse enthusiasm in her students seems to increase with her years of service and experience, her class rooms are always crowded, and the stands are an ideal example of what a woman can do.

Mrs. Elizabeth Powell Bond, dean of Swarthmore, the Quaker coeducational college, is a friend herself. Her mother being a descendant of "Goodman Macy," of whom Whittier wrote in "The Exiles," and who in 1690 was driven from his home to the island of Nantucket because of his religious tolerance. Mrs. Bond has proved her ability as teacher, editor, and preacher; after her husband's death she became the minister of the Massachusetts Free Congregational society, and prepared written defenses for its Sunday meetings, also performed her usual duties of pastor. From her birth she had been a worker in the temperance cause, and was one of equal political rights for women. Her gentle but strong individuality makes its force felt in guiding the young women under her charge. The degree of A.M. has been conferred upon her in recognition of her superior mental qualifications.

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California School Strike.

One of the most novel strikes on record is the one that is now rampant in San Jose, Cal., where 200 pupils of the High school have refused to attend and have betaken themselves in a body to the neighboring town of Santa Clara. The strike is a protest against the methods of the board of San Jose, and the scholars, finding that their repeated protests were unheeded, took their matter into their own hands, and, with the aid of their parents, are forcing the school to close until affairs are arranged.

The trouble seems to be too much politics in educational matters, though there are hints of graver scandals back of that. But the school board of San Jose has refused to rectify any of the wrongs complained of by both parents and children. The stories that are told of the doings of the board would form no part of a Sunday school entertainment, and the effect of these tales upon the minds of budding manhood and womanhood is pernicious.

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Educational Notes.
The number of children enrolled in the public schools of Chicago is 209,000.

Germany maintains thirteen textile schools and forty commercial schools as an aid to its manufacturing interests.

Forget-Rite of Iron Belt, Wis., is only 14 years old, but she has been engaged as a school teacher there. She won a third-class certificate a year ago.

Twenty thousand children are unable to secure accommodation in the schools of New York City. The city seems unable to build new schools.

President Harper has announced that Mrs. Edmund Blaine's gift of \$25,000 to the University of Chicago, to establish a college for teachers, will be put to use at once and the new department will be opened October 1.

W. Randal, A. M., Ph. D., who for the past six years has occupied the chair of applied physics at the University of Michigan, has been elected to the science mastership at the Lawrenceville school. Dr. Randall is an authority in his special branch and the works which he has published in the American Economic Journal, the Proceedings of the Royal Society of London, and the Journal of the British Association, have been received with considerable attention by the leading chemists of this country and Europe. He will enter upon his new field of work at Lawrenceville on September 1.

MINING IN THE BLACK HILLS

Latest News of Interest from the Rich Mineral Regions of South Dakota.

DEADWOOD, S. D., Sept. 12.—(Special)— On Saturday, the 22d of this month, the Holy Terror Mining company completed the final purchase of the property of the Keystone Mining company and the first payment was made at Rapid City. This now makes one of the strongest mining companies in the Hills. The Keystone claims join the Holy Terror property on the north and east and during the last few months the Holy Terror company has thoroughly examined the ore body of the Keystone and ascertained the exact extent of the ore shoots. The Keystone mill was built for forty stamps, only twenty being placed. The old stamps have been replaced by new ones and all of the machinery in the mills has been overhauled. A tramway is being built between the Keystone and the Holy Terror mines, a distance of 150 feet. On the 1st of this month a connecting tunnel was finished from the fifth level in the Holy Terror mine to the ledge of the Keystone mine, a distance of 1,200 feet. An upraise is being made in the main working shaft of the Holy Terror from the fifth level, which will enlarge the shaft from two to three compartments. As soon as this work is finished the ore from the Keystone mine is to be hoisted through the Holy Terror shaft and run back on the tramway. A new stamp mill is to be erected on the tramway and the entire department responded. Shortly after the department arrived three loud explosions occurred on the third floor of the building and in an instant the floor was wrenched from its place and fell with a crash to the floor below, its weight carrying that floor with it into the cellar.

Machinery Totally Wrecked.

On the third floor were five big cylinder presses and five heavy Gordon job presses. These with several heavy power cutters and other mining machinery are total wrecks in the cellar of the building. Shortly after the third floor fell two of the division walls and the fourth floor and the roof fall in. The nothing remains of the building but the two naked front walls.

Considerable trouble, delay and inconvenience was experienced by the firemen because of an entanglement of trolley, telephone and telegraph wires in the street.

No one was injured about the building, although several firemen had narrow escapes when the floors collapsed. At the time the floors fell Bon's bartender, James Cooper, and E. J. Rourke were engaged in carrying out the fixtures of Bon's saloon. Two heavy presses crashed through the ceiling of the saloon and the two men narrowly escaped being crushed to death.

Atmosphere Mining Enterprise.

Plans of a New Company Which Involve Many Millions.

LEADVILLE, Colo., Sept. 12.—(Special)— A transfer of ground, some twenty acres, recently made from the Leadville Drainage and Tunneling company to the Resurrection Gold Mining company, means that in the near future another big milling enterprise will be inaugurated. It is understood that the ground has been purchased for the purpose of erecting a large concentrator which will handle the low grade ore from this property. The Resurrection company, the management of C. T. Carnahan, has opened up into a wonderful mine, and steadily shipped a good grade of gold ore is being made.

Rees is Undecided.

Mr. Rees feels his loss keenly, coming so closely, as it does, on the recent fire he suffered and from which he said he was just recovering himself. He decided as yet what his plans for the future are and will not be said until after his loss has been adjusted. He thinks, however, that he will eventually re-establish himself in business if not at the old stand in some other good location. He cannot account for the fire other than it had been due to spontaneous combustion. He said there had been no fire in the building, and at the time of the fire the building's electric plant had not been put into operation, a fact which disproves the report that a live electric wire had caused it.

At the time of the fire Mr. Rees had a \$700 order of printing almost finished. The Bee's estimate on the loss he pronounces about correct.

Mr. Rees had opened a temporary office in the front of the salesroom of the Carpenter Paper company, Twelfth and Howard streets. He says all the orders he has on hand will be filled by him at the original printing house, the city end of town.

Mr. Rees' firm is the only one outside of Chicago and St. Louis that did theatrical and commercial poster work and his loss will somewhat inconvenience the local theaters and theatrical companies which depended on him for their poster work.

Preparing for Winter Travel.

The Omaha Street Railway company will soon put in use for fall and winter traffic a lot of bright and closed trolley cars fresh from the shops of the Jones Manufacturing company of Troy, N. Y. All of the cars in the company's shops undergoing repairs, and those to be used with the new ones will be put into service as fast as possible.

In the repair shops, snow plows

and the full complement of paraphernalia for clearing the tracks are being repaired for use, and the company will be well equipped to cope with next winter's storms and to prevent them causing an interruption of travel.

Warned of a Thief.

Chief Hedges of Kansas City has notified Chief Gallagher to look out for William

REES' GREAT PLANT BURNS

Printing Company's Establishment Entirely Destroyed by Fire.

BLAZE STARTS IN THE MAIN PRESS ROOM

Origin Unknown, but Charged to Spontaneous Combustion—Other Firms Suffer Heavy Loss—Firemen Hampered by Wires.

The discharge of Harry Baxter and Mike Dwyer, alleged burglars, by Judge Gordon in police court yesterday was not relished by the police, who had set their hearts on sending the two men to the district court.

"Why, that guy Baxter is one of the swellest and smoothest crooks that ever took the coin from a Reuben an' that decision of his nobs in the big chair there makes a good, hard workin' copper sick. What 'ell's the use pinchin' crooks, anyway, say?" was the disgusted remark of a "fly" man who saw the two men given their liberty.

Baxter and Dwyer were caught loitering about the saloon of Henry Andersd, Sixteenth and California streets, last Friday morning early. When two police officers sought to arrest them they ran into a nearby outbuilding. After they were placed under arrest the officers searched the outbuilding and found a chisel, which had evidently been left there by the men. This chisel, it is said by the police, was used in the robbery of the grocery of Heimrod & Hansen, 701 North Sixteenth street, and Henry Robeford, 623 North Sixteenth street, a few nights before the men's arrest. It had been used to pry open the back windows. The police say they are confident of this, as the chisel fits exactly the indentation found on the window sills of these buildings.

At his hearing Baxter made a talk in his own defense. He admitted that his record was a long black one and that he was a crook, but he said he had not committed any offense since coming to Omaha, some weeks ago. He is 60 years old and has a police record as a graftor and confidence man. He was given a ninety-day stay sentence before Judge Gordon was discharged.

Where the Fire Started.

The origin of the fire is not known, but it is supposed to have been due to spontaneous combustion among the printing inks on the third floor near the elevator. At the time of the fire A. T. Johnson, superintendent of the Reform Press association, and Frank Anderson, a press feeder, were in the building. They were working on the third floor when they saw a blaze issue from a point near the elevator shaft. In another instant a sheet of fire seemed to envelop the entire room. They made their way to the street and turned in an alarm