

SCIENTIFIC STUDY OF BRAINS.

Man's Intellectual Superiority Explained by Dr. Edward Spitzner.
A work that scientists in all parts of the civilized world have been awaiting with eagerness has just been issued under the imprint of the American Philosophical Society of Philadelphia. It is a study of brains, by Dr. Edward Anthony Spitzner, professor of general anatomy in Jefferson Medical College, formerly demonstrator of anatomy in Columbia University, and an authority of world-wide recognition upon scientific study of the brain.

Omitting the scientific terminology, some of the most important of Dr. Spitzner's statements may be thus expressed:
The white matter of the callosum, or band connecting the hemispheres of the cerebrum, in great measure determines the quality of human intellect. The cerebrum is that portion of the brain which lies in front of the skull, and is generally accepted as the seat of the mind. Heretofore the quantity of the gray matter of the brain was supposed to determine the fineness and usefulness of the brain.

The fibers of the callosum are the telephone wires connecting and associating the brain centers. Disease or injury in these is attended by profound weak-mindedness or downright idiocy. Contrast of the brain of Dr. Joseph Ledy with that of Prof. E. D. Cope shows that it is possible not only to differentiate between the learned and the



Brain of George Francis Train



Brain of a Panian, Savage



Brain of a Chimpanzee



Brain of a Baboon

ignorant, but that abstruse reasoning produces one kind of a brain, while observation and concrete philosophy produces another form.

Such abnormalities as left-handedness, partial deafness and defects of vision leave their indelible imprints upon the brain.

The brains of various kinds of thinkers show specialized developments; thus musicians' brains are richly convoluted in the auditory association areas.

The average weight of the brain of an adult male is 1,400 grammes. The average weight of a woman's brain is 1,200 grammes. The brain of Cuvier, the naturalist, weighed 1,830 grammes, that of Turgenev, the novelist, 2,012 grammes, and that of Daniel Webster, 1,807 grammes.

Smallness of the occipital area (the curvature at the back of the head) signifies superiority of brain development. This measurement in centesimals, the metric divisors of a 90-degree arc are as follows:

Average man	20.8
Average woman	21.7
Orang-outang	23.2
Chimpanzee	24.2

Concerning the question of weight, Dr. Spitzner says:

"The fruitful investigations of many anatomists have resulted in the tabulation of thousands of brain weights drawn from all the social and intellectual classes, among which more than 100 are of men of intellectual eminence.

"Men of the kind who never remain steadily employed and who usually fail to even learn a trade stand lowest in the scale. Above them come the mechanics and trade workers, the clerks, the ordinary business men and common school teachers.

"Highest of all we find men of decided mental abilities; the geniuses of the pencil, brush and sculptor's chisel, the mathematicians, scholars and statesmen."—Philadelphia North American.

Stuck to His Word.
"Of course Dubley's married. Didn't you know that?"
"No. Why, he said he wouldn't marry the best woman on earth."
"Yes, and he kept his word."—Philadelphia Press.

Fish With Four Eyes.
Fishes have been discovered in Guatemala with two pairs of eyes. One pair does duty above water and the other below, the fish thus being able to see equally well in two elements.

Putting Him Next.
"Papa, what is a hardship?"
"An armored cruiser, son."—Houston Post.

Nature seldom stores a lot of brains behind a pretty face.

THE WEEKLY HISTORIAN



1582—Llewellyn, the last Welsh Prince of Wales, killed at Llandewer.

1614—The Dutch erected a blockhouse near the present site of Albany, N. Y.

1629—Pilgrim fathers landed at Plymouth Rock.

1642—New Zealand discovered by Tasman.

1653—Meeting of the first General Assembly of the people of New York.

1690—Swedes defeated the Muscovites at Narva.

1738—First bank post bills issued in England.

1775—America Congress determined to build a navy of thirteen frigates.

1776—Continental Congress adjourned to Baltimore, on the approach of the British.

1778—John Jay of New York elected president of Congress.

1781—The British evacuated Charleston.

1789—Sierra Leone founded as an asylum for destitute negroes from the United States and West Indies.

1795—Charles Lee of Virginia became Attorney General of the United States.

1798—King of Sardinia abdicated.

1811—American ship Essex captured British packet Nocton, with \$55,000 on board.

1813—Burning of Niagara at the instance of the American forces.

1816—Indiana admitted into the Union as the nineteenth State. First savings bank in the United States opened in Boston.

1817—Mississippi admitted into the Union as the twentieth State.

1824—Peruvians achieved independence by defeating the Spaniards at Ayacucho.

1830—National Republican party, at Baltimore, nominated Henry Clay for President.

1833—Jamaica abolished slavery.

1838—"Atherton Gag" law passed by the House of Representatives.

1844—Bill for the annexation of Texas introduced in both houses of Congress.

1845—British war against the Sikhs began. Ended with annexation of the Punjab in 1849.

1848—Louis Napoleon elected President of the French.

1850—Many killed and injured in boiler explosion on steamer Anglo-Norman at New Orleans.

1859—Victoria bridge, Montreal, opened.

1860—Lewis Cass of Michigan resigned as Secretary of State.

1861—The Prince Consort, husband of Queen Victoria, died. Large section of Charleston, S. C., destroyed by fire.

1862—Gen. Burnside repulsed at battle of Fredericksburg.

1866—Oaks colliery disaster in England, with loss of 390 lives.

1868—House of Representatives announced its purpose to pay fully the national debt.

1871—Alarming illness of the Prince of Wales, now King Edward VII.

1876—Wade Hampton declared Governor of South Carolina.

1877—Osman Pasha surrendered with his entire army.

1880—Congress commemorated the centenary of the inauguration of President Washington.

1890—North Albania reported to be in a state of sanguinary anarchy.

1895—William O. Bradley inaugurated as first Republican Governor of Kentucky.

1897—Strike of cotton mill operatives at Atlanta, Ga.

FARMERS' CORNER

Shipping Celery.

During the early part of the season the packing of celery is done entirely from the rows where the crop is grown, later from the trenches and afterward from the storehouse, writes W. R. Beattie. In preparing celery for market from the rows where grown it is not necessary to remove the entire root CEBERY BUNCH, from the earth, but it may be cut off just below the surface of the soil by means of a stiff knife. Remove the outside leaves and trim the root evenly, pack in boxes and load on the wagon for removal to the washing house. The blanching boards should not be removed till necessary, and the trimmed celery must not be allowed to lie exposed to the sun or wind for any length of time. It is well also to have a piece of canvas to protect the celery while it is on the wagon on the way to the washing house. In marketing from the trenches the process is practically the same as from the rows, except that the celery is already loosened from the soil and the roots can be removed more easily.

Upon reaching the washing room the celery is placed upon a rack consisting of wooden slats over a large trough and subjected to a spray of cold water to cool it and to remove the adhering soil. After washing it is allowed to drain; then it is tied



CRATED CELERY. In bunches of twelve or more plants each, according to the size, as shown in the cut. The bunches are packed in a box for first grade celery and eight or nine for second and third grades. These boxes should be practically airtight, and a lining of paper should be placed in them before packing the celery, or each bunch should be wrapped separately. A common form of crate is here figured for shipping celery in the rough.

The Bull.

No man can afford to head his herd with a scrub bull. The blood is an important item, though not the whole thing. Granted that you see the advisability of a pure bred sire, the next question is how to care for him. If you paid \$100 to \$300 for a bull you naturally want to give him such care as to keep him in his prime as long as possible. It is best to have a stall or shed for the bull where he will be separated from the herd. Give him a yard large enough so that the confinement will not be too severe, and be sure to have his yard surrounded by a bull fence. It is as important to keep people out of the bull pen as it is to keep the bull in. If possible, it is an excellent thing to give him a pasture if you can turn him out without having him run with the milkers. Often there is a pasture for the calves or young stock that can be used. Keep him in good condition, but do not keep him fat enough for the show ring all the year round. It doesn't pay. Always give him kind treatment, but do not let him become familiar with you.—Texas Farm Journal.

Steer Feeding.

The Pennsylvania Station has made some interesting experiments on the value of shelter for steers being fed. It was found that if the lots were kept dry, shelter was not always necessary. Shelter has very little effect upon the appetite of the animals, except in extreme weather. In this climate it is seldom that the weather is too cold for steers on full feed outdoors, provided they are kept in dry quarters and out of strong winds.

It is very essential for fattening steers that they be well bedded. It is decidedly advantageous that the yard be macadamized or given an impervious coating of some kind to prevent mud during soft weather. Wet bedding and muddy yards are more injurious than extreme cold.

The amount of feed required per pound of gain is practically the same whether the steers are kept in a warm basement stable or outside.

To Check Swarming.

If the bees did not persist in dividing their forces so frequently, much more surplus honey could be obtained, and the beekeeper himself would feel more easy about his bees. In producing comb honey in 1-pound boxes, it is necessary to actually crowd the bees into the section boxes, for they seem loath to begin work in such small divisions, and this crowding is one of the incentives which creates the swarming fever. When producing extracted honey, abundant room can be given, and the swarming impulse is greatly checked. Therefore, if bees are to be kept far from the house, and cannot be given much attention, it is advisable to produce only extracted honey, which is done by giving the bees large combs and plenty of room, for it matters not whether the combs are entirely completed or not, as the honey is taken from them and the combs retained to be used.

Burning Out Stumps.

The following method of disposing of large stumps is very efficacious and labor-saving. Whether it would be applicable to small hardwood stumps I do not know, but it is worth a trial. The principle is the same as in burning charcoal, and I presume would apply to any wood that would make charcoal. To clear land of large stumps, dig a fair-sized hole down by side of stump and build a fire of pieces of good firewood, laid snugly against the stump. Gradually cover the fire with soil, and keep covered; if well started and kept covered by occasionally throwing more soil on where it is likely to break out, the fire will continue burning until the whole of the stump is burned into charcoal. On some of our large fir stumps, 10 or 12 feet across, the fire will burn two months or more, and follow roots down 10 or 15 feet underground.—F. A. Hayes.

Farmers at a Discount.

No one who has traveled in Europe and has observed even casually can have failed to note the superiority of agricultural processes there. It is a shock to come home and scan our countryside with its abandoned fields, bramble-covered fences, weedy pasture lands and untended buildings. In the general hurry of America we have gone from one soil to another with our few crops, taking out and never giving back. We have no class of people who think it an honor to be farmers, or, if we have, the sense of pride is lost after one generation. Sons and daughters are restless to set off to the cities, where they can find enjoyments and privileges that country life does not afford. Even the gentleman farmer who goes out from town to settle beside the real sons of the soil does not succeed in making it fashionable for them.—Philadelphia Public Ledger.

Care of Cows.

Prices for milk, cream and butter are high, very high for the time of the year, and may go higher and continue high through the winter. This prospect should encourage farmers to do the best possible for their cows to keep up a good flow of milk. Keeping the cows in the stable on cool nights and feeding to the most profitable point or limit should be practiced.

Do not undertake to winter more stock than can be well kept, as there is no profit in this. Use plenty of bedding, so that the cows may be kept clean. Feed the best combination of grains, market cost considered, for the production of milk along with the well cured corn fodder, silage and good hay, advises American Cultivator. Regularity in all of the work is also a necessary condition for the best success.

Holding Cotton at Home.

I will tell you how I have done for thirty years here in Texas, says a writer in Farm and Ranch. When in the fall I begin to pick I sell when the price suits me. Then when it gets lower by the rush of cotton on the market I place large rails or poles skinned flat on the ground three feet apart and place my cotton on them edgewise, not touching each other. After the first rain I change the bale on the other edge and continue this plan as late as May, waiting upon the market and selling when I get ready or am compelled to sell and not calling upon banker or merchant or any other person. This cotton, every bale, has kept perfectly sound, and not a pound is the least damaged.

Root Pruning of Corn.

Deep plowing among the growing corn, after the roots have met in the rows, may cause harm; "root pruning" is a mistake; to break the roots checks the growth and in hot, dry weather deep cultivation will surely cause the corn to curl, showing injury, while shallow working will keep it fresh and green. As soon as a crust is formed on the soil it should be broken up, to admit both moisture and air, for the one dissolves the fertilizing matter which is in the soil, and the other affects its decomposition and renders it soluble. So that, after a rain which has crusted the surface, the cultivator should be started as soon as the soil is dry enough. This tends to hold the moisture and prevents its speedy evaporation.

Implements and Machines.

With the great scarcity of help the farmer finds it necessary to supply the deficiency so far as possible by the use of the best implements and machines. It costs a good deal on the average sized farm to get supplied with these, and they should be made the best use of and then well cleaned and housed.

Eradication of Prickly Pear.

The government of Queensland, Australia, has decided to offer a reward of £10,000 (approximately \$50,000) for the eradication of prickly pears in the State.

Farm Notes.

Sunlight doesn't cost anything, so have plenty of it in the cow stables.

Cull close when selecting the stock for the breeding pen for use next season.

Don't mix wood ashes with the manure as it will cause loss of the ammonia or nitrogen.

Ventilation is a good thing, but don't trust to the broken window and the cracks in the wall and around the doors and windows to supply the fresh air.

Keep read up on poultry matters. Get new ideas and use them judiciously. It is the man who has the genius of adapting an idea in a practical way to his own needs who succeeds.

SAYS ERRORS IN NAVY UNFIT IT FOR BATTLE

Expert Declares the Boasted Fighting Ships Are Merely Death Traps.

ARMOR BELT IS TOO LOW.

Defects in Construction Pointed Out and Promotion System Is Scored.

Henry Reuter Dahl, associate of the United States Naval Institute and American editor of "Fighting Ships," is the author of a startling article on "The Needs of Our Navy" in the January McClure's. Mr. Reuter Dahl's expertness on naval matters is not disputed and neither is his patriotism. He agrees with President Roosevelt that a navy must be built "and all its training given in time of peace" and with this in view he exposes defects in our first-class battle ships and armored cruisers which all but make them useless as efficient units in a fleet on heavy sea and in real action.

Mr. Reuter Dahl's criticisms appear to be the more amazing on account of the contention that most, if not all of the weak points he emphasizes, will be acknowledged by sea-going officers, "or, if the reader is sufficiently interested, by the testimony of his own eyes."

His principal points are the following: That the shell-proof armor of the American battle ships is virtually below the water line where it will do no good, leaving the broad side of the vessel exposed to the shells of the enemy. That this defect has been pointed

DISASTROUS MINE ACCIDENTS IN RECENT YEARS.

Year	Location	Lives Lost
1894	Albion colliery, South Wales	280
1902	Fraterville, Tenn.	280
1902	Rolling Mill mine, Pennsylvania	175
1903	Hanna, Wyoming	116
1904	Lackawanna mine, Pennsylvania	10
1904	Tercio, California	21
1905	Virginia City, Ala.	152
1905	Ziegler, Ill.	55
1905	Welsh coal mine	120
1905	Diamondville, Wyoming	29
1905	Kurtisk, Russia	390
1905	M. K. & T. Coal Company	13
1905	Princeton, Ind.	28
1905	Coal mine in Prussia	28
1905	Wilcox, W. Va.	35
1906	Bluefield, W. Va.	21
1906	Johnstown, Pa.	23
1906	Century, W. Va.	15
1906	Durham, England	25
1906	Dutchman mine, Blossburg, N. M.	15
1906	Courriere mine, near Calais, France	1,090
1906	Japan	250
1906	Oakhill, W. Va.	28
1906	West Fork, Va.	75
1906	Quarto, Colo.	22
1907	Saaris, Prussia	23
1907	Primer, Colo.	20
1907	Fayetteville, W. Va.	60
1907	Saarbruck, Prussia	200
1907	Las Esperanzas, Mexico	123
1907	Forbach, Germany	75
1907	Monongahela, Pa.	80
1907	Toyoka, Japan	470
1907	Tsing Tau, China	112
1907	Negaunee, Mich.	17
1907	Monongah, W. Va.	398
1907	Yolande, Ala.	81

FARMING IN A DESERT.

There Are Colonizing Possibilities Even in Death Valley.

The craze of "homesteaking" which seems to have reached its limit in the choice of Death Valley as a colonizing possibility. With the idea of transforming the most arid and most desolate portion of the great American desert into farm land, a number of tracts have been homesteaded, irrigation systems have been planned, and other preparations are now in progress for beginning the reclamation of Death

A BLOT ON THE LAST CHAPTER.



out time and again; that other nations years ago recognized it as fatal and now have armor wrapped around the sides of their war vessels from five to seven feet above the water line.

That, despite repeated accidents on board our ships, the Navy Department year after year has approved of plans by which the greatest guns on the ships are directly above an open shaft leading to the powder magazine.

Other nations long since recognized the criminal stupidity of thus endangering the lives of officers and men and have remedied the defect by use of common sense and ordinary precautionary measures.

That, without regard to the protests of experts, our battle ships have been built so low that if the sea is heavy and ships are in action, the sea would wash over the vessels, render some of their most effective guns useless and practically leave the ship to the mercy of the enemy.

The officers in the American navy who command the battle ships and squadrons are too old; that under existing conditions young men cannot attain command, and that the service is badly crippled as a result.

That there is too much "bureaucratic management" in Washington; too much red tape in the Navy Department; that American genius is stifled because of the bureau's immersion in details, and that with the Secretary of the Navy a civilian, he should have a board of expert advisers.

Other matters are dwelt on, but the foregoing are by far the most important. An afternoon's fight on water sealed Russia's fate in the recent war with Japan, says Mr. Reuter Dahl, and the same may well be true of the next war into which this nation is plunged. The issue is so important and the stake so tremendous that the sea power which is prepared in every respect to meet the crisis will be the victor.

Muensterberg on Charity.

Prof. Emil Muensterberg, head of the public charities of Berlin, was the principal speaker at the celebration of the twenty-fifth anniversary of the New York Charity Organization Society at Carnegie Hall recently, along with Mayor McEllan, Gov. Hughes and others. Prof. Muensterberg said that charity work had to be undertaken now in "the twilight of widespread egotism and selfishness," but that the work had changed from a purely philanthropic to a social conception. He finds that private charity does in this country the work done by the government in Germany.

The Comic Side of The News



Money is suffering from bad circulation. An Aurora (Ill.) physician has discovered that peanuts are a beauty diet. This ought to be a circus for some people.

An Eastern banker says, "We want more common sense." We want also more dollars, which are not so common now.

If prices of bread and meat keep on coming down, pretty soon the average man can afford to eat three meals a day.

Chief Spryback, the Indian who drank a quart of blue paint, is carrying the "decorative interior" fad to an extreme.

With 1,300,000 divorce suits in ten years, the United States is plainly in need of a national "Stay-Married Association."

After a while it may dawn on the army recruiters that the average soldier doesn't look upon \$13 a month as any great gift.

Pennsylvania miser who spent only 3 cents last year is dead. He just couldn't bear the increase in living expenses.

Secretary Cortelyou is trying to impress us with the fact that stockings were made to be worn and not to hoard money in.

James J. Hill says the railroads need billions of dollars. From present prospects, it will be some time before they get 'em.

An Italian count one American heiress married turned out to be an ex-convict. Some of the other counts haven't yet been convicted.

To Produce Socialistic Plays.

The Socialist Stage Society of New York City has for its object the production of plays in which socialism is the keynote. Its manager, Mr. Hopp, says that when the society is in good running order it will be able to assure a manager an audience of 5,000 at the start for a satisfactory play. In the meantime it intends to produce its own plays, which it is claimed can be done for a very small actual cash outlay.