THE PITTSBURG DISPATCH, SUNDAY, MAY 22, 1892.

RESTING THE BRAIN, A Physician Writes on Exercise for Men Who Work With Their Heads. THE THEORY OF CHANGE.

One Set of Nerve Centers May Be Asleep While Others Are Busy.

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HIGH LIVING AND DESK LIFE.

Use Dumbbells Ten Minutes and Walk Five Miles Every Day

(WRITTEN FOR THE DISPATCH.) The brain-workers I am thinking of in writing this article are not school children or college students, but men and women. Physical training is probably of even greater importance in childhood than it is in adult life, because upon the amount and kind of it received in early years depends largely the kind of body which the man and woman must receive, use, and take care of. If, when they begin the real work of life, this body is sound and well proportioned, with all its parts in good working order, they have a fair start; if it has been damaged by heredity, by habits, or by what is commonly called accident, they have to carry more or less weight in the race.

I am writing now, however, about menbusy men-men who use their brains rather



than their muscles in the work upon which they are engaged.

The brain is not a single organ, but a collection of many organs, much alike in general structure and more or less intimately connected, yet distinct in location and in functions. Each of these sub-brains is composed of a group of cells, and when these cells act their structure changes-a part of the substance of each is decomposed and carried off by the fluids which bathe them, leaving a minute cavity. This loss must be repaired to enable the cell to recover its energy and powers, and for this purpose rest and a supply of proper nutritive material are essential.

The Science of Change of Work. If the cells of the nervous centers whose

tion or worry, has little or no influence in producing diseases or discomfort if the or-ganism be normal and healthy to commence MILK OF THE WORLD with; but if the brain has to use deformed eyes, or obtain its blood supply from a feeble heart, or to use for fuel blood which Statistics Show Londoners Use a Quarter Pint Each Per Day. contains salts, or leucomaines, or albumeses which are irritating or narcotic or otherwise harmful, then trouble of some kind may be confidently anticipated. "Exercise," or "bodily exercise" or "physical exercise" are terms commonly used as if they were related only to muscu-lar action, and the amount of exercise which a man should take in a day is stated in THE DURABILITY OF ALUMINUM. An Attachment by Which a Bicycler Can Give His Lady a Ride. terms of mechanical force. For example it is estimated that a healthy man ought to

ODDS AND ENDS OF SCIENTIFIC LORE take a daily amount of exercise equal to 150-foot tons, that is to the force required

to lift 150 tons one foot high. But the physical exercise which I have WRITTEN FOR THE DISPATCH. A problem which is of the deepest interes in mind is exercise of the nervous system also. It would be possible to produce by electrical stimuli the contraction of the into statisticians, agriculturists and social economists is the production and utilization dividual muscles concerned in walking in of milk and milk products in this country. such a way that each muscle would be large Steps are now being taken to secure reliable and strong, and yet that the person possess-ing them would be unable to walk because data on this subject.

the nerve centers which control the action of these muscles had not received their In the meantime some statistics which have just been collected in England are of PRESCRIBED FOR THE AVERAGE MAN PRESCRIBED FOR THE AVERAGE MAN great value. Within the last 20 years the number of cows in Great Britain has decreased in proportion to population. In 1866-70 there were 82.1 cows per 1,000 of the to co-operate with each other to produce the desired movements and no others, and population, while in 1886-90 there were only this co-ordination is effected by means of 77.9. The absolute number of cows had in creased, but not sufficiently to keep pace

When Walking Becomes Automatic. with the growth of population. In Ireland In some kinds of co-ordination, as in the period 1886-90 showed a higher proporvalking, the action of the nervous system tion (290.8) of cows to population than in soon becomes automatic, and is performed any of the four quinquennial periods, but without conscious effort; but when the will

must be exerted in order to produce the movement desired, the work of the nervous population. system is greater, and fatigue and exhaus-tion will result more quickly, not neces-sarily because more muscular force has been figures furnished by the railway companies evolved, but because more central nervous gray tissue has been used up.

The strong muscles of the smith's arm will give out before those of a skilled musician if both are set to running simple scales on the piano. Du Bois Reymond defines exercise as

"the frequent repetition of a more or less complicated action of the body with the cooperation of the mind, or of an action of

the nervous system.

total London milk supply amounts to 133,-600 gailons per day, or 48,500,000 gailons per annum, which gives a daily consump-tion per head of one-quarter of a pint. Figures supplied by milk retailers in varithe mind alone for the purpose of being able to perform such action better." The definition is in the main a good one; but the pur-pose of the brainworker in exercising may ous districts show an average daily con-sumption per head in the West End of not be, and usually is not, to perform the action better. His objects may be—first, to rest one part of his brain by setting another part at work to co-ordinate certain muscles; three-quarters of a pint, while in the East End it is only 0.08 of a pint. Returns col-lected from a number of public institutions show a mean daily consumption per head of second, to strengthen the heart and improve the circulation and oxidation of the blood; third, to get rid of unnecessary fatty tissue; 0.90 ounce of butter. fourth, to improve appetite and digestion, and fifth, to obtain sleep. The form of exer-cise which will be of most use to him in his daily life will be that which can be contin-ued for a considerable time without producing breathlessness or irregular action of the heart, or what is called the exercise of endurance; yet to this should be added some exercise requiring rapid action for a short

time-the so-called exercise of speed. Brainwork When Muscles Are Fatigued, Walking is a type of exercise of endurance; practice with light dumbbells is a good exercise of speed. That form of ex-ercise whose object is to develop strength,

such as the lifting of weights, etc., is not a desirable form for brain workers. Physical exercise has its evil as well as its good side. Many people seem to suppose that plenty of exercise is a sovereign remedy or pre-ventive for most disorders, and that the more one gets of it the more brainwork he

can do, and the less care he need take in other respects. This is incorrect; a man cannot do his best thinking when his muscles are fatigued. Gentle exercise, such as walking, will often help the brainwork, because it increases the rapidity of the circulation; but violent exercise has a contrary effect. For the great majority of literary workers athletic exercises are of doubtful utility.

The question of brain rest and physical exercise should be considered with reference to the usual daily routine of work and to vacations. If it be possible to give up all work for a month or six weeks in the year. and to spend this time in the woods, among the mountains or on the sea-hunting, fish-

ing, riding, walking-doing almost anything in fact that will keep one for the greater jury. After being vulcanized, the piece part of the time in the open air and sun-light, and which will interest him in matidention ters outside of his ordinary work, it will be time and money well spent. This, however, wearer as possible. For attaching it to the face springs were at first tried, but there will not do away with the need for a certain was a strong prejudice against them on ac-count of their supposed tendency to interamount of regular daily exercise when he is at home attending to business. fere with the circulation and cause irrita tion and possibly imflammation or absorp A Prescription for an Average Man. tion of the tissue. Finally it became It is impossible to lay down definite rules customary to keep the nose in the as to the amount and kind of this exercise required position by fixing it to eye glasses, which is required to preserve health and yet and in this way the wearer could almost defy detection. For this purpose alumi-num is now in vogue. It is strong and shall not involve a waste of time and energy. The most that can be said is that the muscles should be kept in fair normal condition. light, and is easily covered with muslin, which is afterward painted. It has thus be-Probably for the majority of men 10 or 15 minutes' work with light dumbbells on come a matter of even greater case to adjust rising in the morning, with a bath and thor a portion of the nose or ear with perfect ough rubbing, and from three to five miles' nicety and have it painted to so nearly re walk during the day is sufficient and not semble the skin that covers other portions excessive. of the face that the fact would remain un The force required in walking on a level known if you met the wearer a dozen times surface is estimated as equal to raising one-twentieth of the weight of the body through Scores of people are daily met on the streets who are wearing some such the distance walked. The objections to appliance, and many of them have been do-ing so so long that they have almost forwalking are that it takes too much time, and that it is shirked in disagreeable weather gotten the fact themselves. Five times out and on hot days. Time, however, is an of seven the loss of the nose is caused by abessential element in exercise for braincess centrals which break just inside the workers-and there are not ten days in the nostrils. The disease then attacks the bone year too rainy or too hot to permit one's getting a two mile walk at least some time which decays very rapidly. Sometimes a portion of it is saved, but this is the excepduring the day. It is important to have tion and not the rule. some other object for the walk or ride than of mere exercise, otherwise it is apt to become a disagreeable duty: hence, compan-A Railway Accident. onship in exercise is desirable. A singular suit has been brought in a The thing to be remembered in deciding Vienna court. A firm of electrical engineers upon the character and amount of the musconstructed a miniature electric railway for cular work to be done is that the object is the defendant, who intended it as a Christnot to obtain strong muscles, but rather fresh air, good digestion, change of thought, mas present for his children. As the deand sound sleep, and that to insure this it is far better to begin before one feels the need fendant pleaded, when the suit for payment was brought into court, that the electric of it than afterward: for thus, and thus only, railway was a failure-the electro motor being insufficient to set the train in motion can one have a reasonable expectation that the best and pleasantest part of his life will -the Court demanded an "expert opinion" come after he is 50 years old. on the capacity of the apparatus. A day was appointed for the trial trip, which took place in the hall of the court, in the pres-J. S. BILLINGS, M. D. ence of the Judge, a reporter, two experts in electric installations and the representa-LABOR IN ALASKA'S WILDS.

r ceiling which will withstand from any sort of rough treatment also claimed that walls, ceilings a tened or strapped walls which are with this material will never crack pure this plaster lies on the ceiling gauged putty.

Compress Heater and Sterilis

A useful appliance has been intro hospitals in the shape of a compres and sterilizer. This enables all the tages of the ordinary compress markedly increased. The points for the new device are that there moistening or wringing of hot eloths neces-sary; that it does away with the use of oll silk or cotion, as it cannot wet bedelothes and will retain heat longer than the ordi-nary compress, and the compresses may be applied to different patients without wash-ing, as they may be easily sterilized and freed entirely from germs. The steaming of poultices and plasters, etc., is facilitated, and food for infants or invalids may be pre-pared in the sick room without any escape of steam. This device is also eminently adapted for the sterilization of instruments, sponges, bandages, milk, etc. The steril-izer is opened from the side, and thus all condensation of steam on dressings is avaided, and any part of the dressing may be removed at pleasure without rendering the remainder liable to excessive moisture. moistening or wringing of hot cloths neces-

New Method of Preserving Logs.

A new method of impregnating logs with zine chloride in order to preserve them is in use in Austria. The process is very rapid, and has the additional advantage of being applicable to the timber as soon as it this was not due to an increase in the is felled. The zinc chloride solution, which number of cattle, but to the decrease of has a specific gravity of 1.01, is forced into the thick end of the log by a force pump. As regards the London milk supply, the To this end an iron disc of suitable diame-ter and furnished with a cutting rim is forced into the end of the log and secured show that the total quantity of milk forced into the end of the log and secured by clamps. The preparatory work for im-prognating each log takes from three to four minutes. When a pressure of two or three atmospheres has been maintained at the thick end of the log for a few minutes the sap begins to exude at the opposite end, and when this is followed by a weak solu-tion of zine chloride the operation has been completed. About two gallons and a half of the solution are required per cubic foot of timber treated. One disadvantage of the process which has not yet been over-come is that it does not distribute the solu-tion so uniformly as some other methods. brought by rail into the metropolis was in 1890 rather more than 40,000,000 gallons, or nearly 110,000 gallons per day. Similar returns collected nearly 30 years ago show that at that time the quantity did not exceed 2,500,000 gallons per annum. The

Tet Another Insulator.

Another claimant for that bonanza of the 0.66 pint of milk, 0.54 ounce of cheese and electrical field, a durable and effective in-0.90 ounce of butter. Taking the country generally, the aver-age consumption per head per annum of milk, butter and cheese is estimated as fol-lows: Milk, 15 gallons; butter, 151 pounds (of which 8.8 comes from abroad); cheese, 12 pounds (of which 6 pounds are foreign). Badweige all the charge and butter to their sulator, hails from Germany. He mixes three parts of steatite with two of powdered chalk or magnesia and chalk, and thoroughly incorporates the ingredients until the material has a uniform, "soapy" touch. The mixture can then be compressed into dense masses, and is ready to be worked up 12 pounds (of which 6 pounds are foreign). Reducing all the cheese and butter to their equivalents in milk, the total consumption of the United Kingdom is 2,546,000,000 gal-lons, of which 1,129,000,000 are produced abroad and are imported in the shape of butter or cheese. The 1,417,000,000 gallons of milk produced in the United Kingdom is thus accounted fort Consumed as milk, 570,-000,000 gallons; butter, 617,000,000 gallons (representing 105,000 tons of butter); cheese, 224,000,000 gallons (representing 100,000 into any convenient form. To increase the insulating properties of the chalk it is kneaded with three parts of resin or shellac dissolved in alcohol until a sort of dough is obtained. This is then dried, powdered, warmed with constant stirring to 30° centigrade, and finally compressed into hot molds.

Durability of Pure Aluminum.

(representing los, oto to is of butter), directly 224,000,000 gallons (representing 100,000 tons of cheese); and miscellaneous (con-densed milk, etc.), 6,000,000 gallons. Even these results are only tentative, but they In view of the conflicting statements that have been made with regard to the various qualities of aluminum, some statistics lately throw an interesting light on a most diffi-cult and complex subject and are instructive received from Germany are of interest. The and valuable to statisticians who are coverresults of the loss in weight in three spoons of different compositions, after continuous use, are given.' A silver spoon lost 0.403 Artificial Nose and Ear Manufacture. per cent per year; an aluminum spoon lost 0.630, and a German silver spoon 1.006. It thus seems evident that as regards durabil-It is quite the fashion to attribute to aluminum adaptability for every conceivity there is not much to choose between sil-ver and aluminum, while the alloy wears away more easily than either. able purpose. In the majority of cases there is some warrant for doing so, as the new metal lends itself kindly to all kinds of

New Method of Mine Ventilation.

conditions and uses, and among these is the manufacture of artificial noses and cars. A novel device has been used to produce Wonderfully good imitations of these meman air current in a shaft in Pennsylvania. bers were formerly made in wax, celluloid, A small steam pipe enters the top of a wood, porcelain or vulcanite. Vulcanite wooden airway for a depth of nine feet, and was the substance most in favor, from its the steam escaping from this pipe causes a rush of air which obviates the use of a fan. So considerable is the effect of this steam ject that 8,604 feet of cubic air is carried out at the outlet of the shaft every minute. This system has been so successful that it said to have been a very severe one on arctic fauna. Toward spring, it is said, thousands s regarded as more practical than the air of arctic animals were driven from their usual haunts by cold and hunger, many of them barely eking out a wretched existence by ans now in common use.

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and bat-	BILL NYE IN A ZOO.	it all, and who tells his parents how to grow up and be good men and women, will be compelled to fork over some of his ability to the poor fellow who has failed as a sand	100 million (100 million)
e coated k. Used iling like	He Interviews Mr. O'Hoolihan on Leading Questions of the Day.	pounder. Mr. O'Hoolihan favors more rigid mar- riage laws, especially requiring those who marry to refrain from shooting each other	
ser. oduced in as heater	A NEW DISTRIBUTION OF BRAINS.	within the first year, and also restraining them from publishing their divorce pro- ceedings, so that children are liable to get hold of them. He believes in having	
to be claimed	How a Good Man Fought Valiantly to Save a Tough Speak-Easy.	suitable places, where people may go to get their divorce business and soiled linen attended to. The Trouble With English Humor.	
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INFORMATION AS TO ENGLISH HUMOR

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think.

The Elephant's Overalls.

(WRITTEN FOR THE DISPATCH.) Cincinnati has one of the most attractive coological gardens in the United States, the fauna displayed there being of an unusually robust and attractive quality. Fondness for a close study of animal lite has ever been a characteristic of mine, and on arrival in any city of considerable size I register, send up my luggage and inquire at once for the zoological gardens. Soon afterward you may see me engaged in studying the sloping shoulders of the giraffe or the low, retreating forehead of the crocodile.



At the Zoo in Cincinna

Prof. Louis Agassiz, with whom I have ectured a number of times to standing room only, divides the earth into three fauna, viz : 1. The arctic. 2. The temperate. 3. The tropical. The arctic fauna was homogeneous, and embraced the northern extremeties of the several boreal continents down to the isothermal zero. Possibly I do not make myself quite plain, but a little hought will make this perfectly clear. Oatmeal Isn't Popular Up North.

The arctic fauna embraced those anim als which, like the polar bear, prefer a strictly meat diet during the winter, exhibiting a strong repugnance to oatmeal and adhering to their heavy jaegers the year round. The arctic fauna also embraces the walrus, the

and Cincinnati quail are also found as far north as the utmost limit of exploration and human vertebrate. Rodentia and pachyderms do not do well north. Insectism does well here, and some gallinaceous birds, notably the penguin and

gannaceous orras, notably the penguin and the toboggan, but pachyderms and articu-lata are very seldom found here. Cincinnati has two good specimens of the polar bear. This animal is found in the ex-

herring and young explorers. The white or polar bear can sit for hours on a cake of ice without taking cold. What a wise arrangewhile eating his explorer.

THE BIG SHOW BILLS. Nearly a Million Feet of Space Cov-O'Hoolihan favors more rigid mar-I to incominan favors more rigid mar-laws, especially requiring those who y to refrain from shooting each other in the first year, and also restraining from publishing their divorce pro-ngs, so that children are liable to get of them. He believes in having her been when need to be the start of the sta ered With Gorgeous Paper

IN THE TWO CITIES EVERY WEEK.

Rivalry of Theaters for the Windows and Piles in the Streets.

he Trouble With English flumor

Asked his opinion regarding English hu-mor as compared with Irish and American humor, he said: PASSES FOR HANGING LITHOGRAPHS

English humor of to-day is of a IWRITTEN FOR THE DISPATCH. restful character, and used mostly as a means of relaxation. In the days of Thack-One of the most remarkable facts of civilized life is the number of important busieray and Dickens, Englishmen seemed to enjoy a mirth-provoking humor of the American order, it seems to me, but now it nesses that exist of which the public have the most absurd ideas. Bill posting is a runs largely to pans and petty larceny. It is a sadder humor than ours, a good style to adopt during Lent. English humor with sulphur and treacle can do no harm, I conspicuous instance of this. We see great posters pasted on boards around vacant lots or old buildings, and as we glance at the announcements or pictures there displayed we regard the whole affair as a very "An Englishman came over on a Cunarder unimportant element in city life. We

the other day, and the passengers put the customs officers 'on to him' because he seemed to have swollen up so rapidly the day before he reached New York. But how know that men go around with piles of bills, buckets of paste and brushes, and that, with a few dexterous movements, they condo you suppose he got out of it? He told the officers that the day before he landed the vert a space full of tattered paper, or an expanse of old boards, into a brilliant dispassengers got him to talking on the tariff, and before he had an idea of what he was play of dramatic scenes in many colors.

doing he had enlarged upon it! "He turned out to be the song and dance We see them do this, but few of us stop to think that these men are part of a syseditor on the staff of *Punch*, who was com-ing to America for his health, also for the purpose of organizing a school of what is called Whitechapel humor, which is quite popular in England now." temized business that involves many thousands of dollars of capital, an army of workmen and the most careful arrangements by men of long experiences. Yet there is no business in the city that calls for more careful attention than this of bill posting.

The Cincinnati zoological works possesses the tallest and handsomest giraffe grandi-flora that there is in America, so I am told. A few figures will convey some idea of its extensive character. In Pittsburg and It can easily eat out of a third story window, Allegheny there are, under the control of the and belongs to Rescue Hook and Lad-der Company No. 3, of Cincinnati. city bill posters, 75,000 lineal feet of boarding, averaging ten feet in height. This is 750,000 square feet that is covered with bills of various kinds all the year around.

Bills That Make the Boys Stare.

Besides this there are 3,000 "threesheet" boards. A "three-sheet" bill is about 31/2 feet wide by 71/2 feet in height. Spaces on which can be pasted up 20,000 "one-sheets," each 314 by 214 makes up the total space of free reading and art work that is placed at the disposal of the inhabitants of the two cities by the work of the bill posters. To paste up all this paper every year 1,200 barrels of flour are used, with the services of 22 men, who are constantly employed, while extras are put on when there is a rush. Three horses and wagons help to carry the paper, paste and men to some extent, but not alto-gether. Since rapid transit has become general in the two cities, bill posters have een able to use the street cars extensively. and a great part of the routes can be covered n this manner that formerly required the ise of wagons.

use of wagons. The largest stand in the city is 550 feet long, by 12 feet high, but most are 21 to 42 feet long, by 10 in height. The theaters use a great deal of the bill board space, but not all of it. This was shown a week ago, when, notwithstanding that seven of the eight regular places of amusements were running, Barnum's circus occupied with its announcements and pictures no less than 7,000 feet of boarding, 10 and 12 feet high.

The Space Is Never Idle. During the regular winter season, each of

the eight theaters uses on an average 4,000 sheets of paper on the boards and walls, ex-The mandrill is a strange looking beast with a brief but spirited tail. It has a blue nose, but flushes easily if taken by surprise. It then goes and buries its face in clusive of lithographs, which are known technically as "window work." When the season is over, commercial announcements, its hands in an embarrassed way, erroneously thinking that it is secure from view. patent medicine announcements, railroad bills, etc., fill the space. It is never idle. The bill poster goes about his work in a methodical manner. Before he leaves the It was on board a train between Wheeling and Pittsburg the other day that I heard a sad tale. It was told to me by a refined bill room he has his paper all methodically Kentucky gentleman, who was attending church a few weeks ago when the abrill ery of fire burst forth on the street of the village. The pastor had been unusually interesting in his talk and unusually strong arranged, so that when he arrives at the board he is to cover he can take each sheet of paper just as it comes, and put it in the right place. Suppose it is a 28-sheet stand —that is, a bill seven sheets long and four high. The operator takes the sheet for the left upper corner and pastes it neatly in place with a very few touches. Then he Age of Steel.]

thoroughfares, are always gay on Sunday with colored lithographs and show bills, and the ingenuity displayed in getting the an-nouncements into places where they will attract the most attention can hardly escape

attract the most attention can hardly escape the notice of any ordinary observer. There are extensive building operations going on across Smithfield street from THB DISFATCH office. No sconer had the occu-pants of the buildings that have since been demolished closed up than the whole block was covered with glaring announcements of some of the theatrical attractions in the site. About the first of April when there city. About the first of April, when there are a great many empty store-rooms, the windows are covered with gay lithographs, and the whole town breaks out into all the colors of the rainbow, and a good many others that no respectable rainbow would own, all setting forth the merits of different theatrical entertainments

heatrical entertainments. Sometimes two sets of theatrical adver-tisers will meet in the small hours of Sunday morning, while each is trying to steal a march on the other in the way of sticking up bills and lithographs in some spot that has been neglected till now. Then there is a row, and sometimes blows exchanged, in the heat of the moment. Each party has waited till the other was supposed to have gone to bed, and hence the complication.

Plastering One Over Another.

Then one party will paste up his bills, and ten minutes after the other will come and cover them with his own. Occasionally there will be a dispute over some store win-dow. Say that one theater has managed to get into the store and cover the whole in-terior of the window with lithographs. There is nothing for his rival to do but to There is nothing for his rival to do but to stick up his paper outside, thus hiding the inside display. This was done in Pittsburg a few weeks ago, and the man who had se-cured the inside came along about 3 o'clock Sunday morning and saw it. In a very few minutes he had pulled down all the outside lithographs, allowing his own to be seen

again. At the conclusion of his work he chuckled softly and went home to bed, satisfied that he had spoiled his rival's little game com-pletely. But his opponent was still on the alert. He happened to see what the other was doing, so he made his way back to his theater procured a backet of black paint was doing, so he made his way back to his theater, procured a bucket of black paint and a big brish, and returned to the win-dow. When the morning sun shed its rays on the scene it revealed a black, blank space where the inside man expected to see a handsome display of his lithographs, and the air was blue for ten minutes or so. He cooled off in the course of time, however, and when, in the afternoon, he met his rival, smiling and innocent, the two men shook hands, as the defeated one murmured: "I pass." .

Watched His Paper All Night. It is only three weeks since an advertis ing agent of one of the theaters spent all Saturday night walking up and down before a vacant store on Fifth avenue to protect his "Sunday showing." that he had ar-ranged with much care and elaborateness about midnight, and that he could not af-ford to trust to the tender mercies of his rivals, who might have spoiled his work. There are eight theaters in Pittsburg and Allegheny, counting the museums, and each theater puts out on an average 1,500 litho-

graphs every week during the season. One wonders where room can be found in the windows of the two cities for these 1,200 lithographs, but there is plenty of room for them, and for 100 or so additional, if neces-sary. To procure the privilege of placing these lithographs in show windows it is incumbent on the theater managers to give away a certain number of passes every week, many people accepting passes who would not give the use of their windows for money enough to buy the tickets two or three times over. This is one of the inex-plicable peculiarities of human nature, for

most theater managers detest deadheads on general principles, particularly "lithograph deadheads.' The city bill posters have to give away

300 regular season tickets to theaters, each ticket admitting two persons, besides spending thousands of dollars directly every year for the space they use for their bill boards. It takes a great deal of capital, as well as experience, to carry on the business of post-ing bills in Pittsburg. G. C. J.

CURIOUS GENIUS IN NORWAY.

A Lock That Has to Be Opened by Puffs of the Breath.

A lock constructed on the most curious scientific principles has lately been exhibited by an inventive genius in Norway. It consists of a bolt which fastens the door. and is held in position by a weak spring; a pendulum is suspended from a hock on the inside of the door, which, when set in motion, strikes an iron hammer, causing it to fall on the head of a bolt and press it down so as to release it from the fastening of the door, and a hole is bored through the door opposite the bob of the pendulum, which is set in motion from the outside by blowing strongly through the hole. The security of the lock thus depends upon the fact that several puffs of air are necessary to cause the pendulum to vibrate with a sufficient amplitude to reach the hammer, and each successive puff must be given at the exact oment when the pendulum passes the hole or opening on its journey toward the ham-The exact time of vibration of the pendulum is made known to the person unlocking the door by means of a second pendulum which he carries, consisting of a string to one end of which is attached a weight, and provided holding the paper in a certain position that at the other end with a loop by which it can be conveniently attached to a hook on the outside of the door. This key pendu-lum is previously so adjusted as to length that it vibrates in exactly the same period of time as the unlocking pendulum on the inside of the door. To unlock, the key pendulum is hung on the outside and set in notion, and each alternate time it passes its lowest point the operator blows strongly through the hole in the door, setting the unlocking pendulum into synchronous vibration, which, after a few puffs of air, strikes the hammer and frees the bolt.

penguin and the pemmican. The salt horse

reme north, subsisting mainly on kippered

without food. Last winter, for instance, is

licking the axle grease off the north pole

while thousands of other arctio

The Elephant Was Not Feeling Well. The elephant was feeling very poorly when I saw him. His skin looked dry and feverish. When he walked his overalls rattled together like tin clothes fastened

in the arctic fauna. The season is too short. together with wire. I would never take my pachyderms too far

ment of nature this is which enables the polar bear, even when heated and perspiring after a long, hard chase after an explorer, to seat himself on an iceberg with impunity

seat himself on an iceberg with impunity while eating his explorer. Living on Polar Axle Grease. This animal is also enabled to go for days

ial functions are perception, and consciousness are inactive we have what is known as sleep, but one group of may sleep while others are at The nerve centers or sub-brains work. which are used in playing chess, or in speculating on the Stock Exchange, are no doubt somewhat different from those which are active in working out a mathematical problem, in writing a prescription or pre-paring a sermon; and also for those brought nto play in painting a picture or compos ing a piece of music. Certain nerve forces are active in all these forms of brain work. but the action of other centers is more of less peculiar to each. The consequence is that one of these sub-brains may be resting, or, in other words, asleep, while the others are active; and not only so but it may sometimes be put to sleep by setting the others or some of them at work.

This is what in popular language is called turning the mind from one subject to another, which is sometimes very easy and sometimes so difficult as to be practically impossible. It is greatly to the advantage of the brain-worker that he should be able to control, to a considerable extent at least. the times when these several sub-brains shall work and shall rest; and an important means of doing this is through the agency of physical exercise, involving special exercise of will and of conscious perception. Every educated man, whether he be lawyer. clergyman, physician, teacher, literary journalist or artist, believes theoreti that he ought to have a certain amount of physical exercise to maintain health and to preserve his powers of thought and of expression of his ideas in the con dition of efficiency which is essential to his purpose; but, practically, most of them pay little attention to this need until some sense of discomfort, or loss of power, shows them that some damage has been already

High Living and Good Exercise.

Then they may go to a physician, who will probably advise them, among other things, to take exercise. But I am not writing for men who are under the charge of a physician, nor even for those who are beginning to fear that they may soon require medical advice; hoping rather that this may be read some of the many brainworkers between 25 and 40 years of age who are still performing their tasks without special effor The completeness and ease with which the work of an organ or of an organism is done depend largely upon the frequency and regularity with which its functions are sed. If this exercise is excessive, or if it is insufficient, loss of power results. The brain-worker is liable to exercise cer tain parts of his nervous system, and possibly the muscles used in writing, to excess and to exercise certain other nerve centers and the greater part of his muscles too little The mere loss of muscular power or o capacity for continued physical effort which results from this disuse, is in itself usually a triffing matter to him; but the remote consequences may be serious, and this is especially likely to be the case if, while taking little exercise, he continues to eat, drink and smoke as if he were getting plenty of it.

The effects of rich food, of wine, beer and alcoholic drinks, and of tobacco, are very different in men who give their muscles plenty to do from what they are in those who do not. The effects in the latter class vary much with individuals; some become too ist, others thin and dyspeptic; one man suffers from obscure gouty and rheumatic troubles, another from diabetes, a third from incipient and usually unsuspected Bright's disease, while, in a fourth, an irritable or intermittent heart, producing a sense of want of breath, is the first symptom These that attracts attention. These troubles come upon the idle lounger even more frequently than upon the brain-worker; it is not the excess of cerebral exercise which produces them.

How Brain Depends Upon Body. Simple brain work, without special fric-

Part of the Union Where Workingmen Have No Cause to Complain.

Harper's Weekly.]

Alaska. Three dollars a day, with board and lodging provided by his employers, are miners' wages. Indian workmen in the mines receive \$2 a day and "find" themselves. The cost of provisions adds a dollar a day for each white employe to the expenses of the mining company, and with these items in the operating expenses, any fractions of dividends sufficiently prove the richness of the mines. Hydraulic mining begins in May and lasts

the quartz mills can run all the year round or becoming a great mining country.

Newcastle Chronicle.

Measurement of weight by the "stone " says a writer, arose from the old custom farmers had of weighing wool with a stone. Every farmer kept a large stone at his farm for this purpose. When a dealer came along he balanced a plank on top of a wall, and put the stone on one end and bags of wool on the other until the weights were equal. At first the stones were of all sorts f sizes and weights, with the result that dealers who wished to make a living had to be remarkably knowing in their estimates of them. But the many inconveniences evolved by this inequality eventually re-

sulted in form weight.

ing the same ground in this country.

The workingman need not complain in

underwent a mighty jolt, the entire train got off the line, and the drama of a "derailment" in miniature was exhibited before the commission. The experts declared that the faulty construction of the rails was the cause of the accident. The adjustment of the rails was ordered and another day was fixed for a further trial before the Court. The moral of which is that it is impossible nowadays to keep electricity out of any-thing, even a suit for children's toys.

until October; and unless they are situated in snow-choked canons, difficult of access, The great Treadwell mill on Douglas Island thunders night and day, winter and summer, grinding out in the 12 months ending with last May \$769,765 80-sufficient answer to all that has been said against Alaska's being

Weight by the Stone.

the stones being made of a uni

WELLINGTON'S FAMOUS BALL

The polar bear, however, pulled through without great suffering and in very fair con-Belles and Beaux Who Beally Danced the dition. Dance of Death.

Manchester Times.]

living in a fine hotel on the Rue de la Blanchissere which stood on its own grounds and had a fruit and flower garden extending to the city ramparts. Their Graces moved in all the society of Brussels, and entertained a great deal. The Duchess who had issued 220 invitations for her ball. proposed to recall them when she heard that Napoleon's army was advancing. But the Duke of Wellington, to prevent alarm, requested that the ball might take place. Nevertheless, many English families were frightened away from Brussels, and post horses were kept harnessed in the Duke of Richmond's stable, in case bad news from the scene of the conflict should make it advisable for his children to be sent to Antwerp. The majority of the people of Brussels were violent Bonapartists and were prepared to entertain Napoleon in great style should he force the British army to retreat and enter their city in triumph. So it was that the Duke of Wellington and many of his officers went to the ball after the business of the day had been at-tended to. While the merry couples were flying around, a dispatch from the front was handed to Wellington. He asked the Duke of Richmond for a private room where he might consult with some of his generals who were present. 'The Duchess' dressing room was the only convenient room safe from intrusion. Candles were hastily lit on the dressing table at which Wellington sat with a map before him, and having extives of the contending parties. A large plained certain points to his staff they all poard, upon which the rails were laid, wa rejoined the company. They left the house before 10 o'clock, and succeeded in doing so fixed in the hall and the train was set in motion. At first it moved quite smoothly along the line, but suddenly the carriages without attracting any attention. Very tew, if any, of the dancers guessed how near at hand was the crisis which was to decide the fate of Europe, and it never entered the heads of the young girls that some of their partners were dancing the "dance of deatl

SEVENTY-FOUR DOUBLE COUSINS.

An Interesting Family Relationship Case Among French Canadians.

Pearson's Weekly.] Tandem Blevcle Attachment.

The popularity of the bicycle has greatly increased since the discovery of the fact that it is just as well adapted to feminine requirements in the matter of exercise and enjoyment as to those of the sterner sex. To some devoted couples, new arrangement will appeal very forcibly. This is a tandem attachment to a safety bicycle for use by a

There lived the two families of Rheaum ady. The price of the attachment is con paratively small, and the evelist by having and Morin; and in each of these families t and attaching it to his own machine finds there were eight children-four boys and imself in the enviable position of being four girls in each case. As the young peoable to take any lady friend for a run when ple grew up, every Rheaume boy married a Morin girl, and every Morin boy a Rheaume ecasion requires. girl,

A Useful Plaster,

A material combining the best qualities of the ordinary plaster and those of fireproof cement is being used in London. One of the advantages claimed by the manufacturers of the plaster is that the plasterer can commence a room in the morning and completely finish it before the day is out without special preparation of the surface. The next day there is a hard surface, which coning in a single village was probably never known before. tinues to toughen until the result is a wall

animals died off, owing to the fact that curiosity regarding the open polar sea is ap-parently falling off, and the carnivorous The Duke and Duchess of Richmond were animals of the polar regions are now often seen to pause and look at each other as who should sav: "Don't it seem to you that it s getting to be a pretty long time between lar expeditions?' About the only real merit attached to the Arctic regions, it seems to me, is the fact that there is said to be absolutely no malaria there and very few mosquitoes. On the other hand, the tropical fauna must continually grapple with a very malarial cli-mate, the very sine quinine of a climate, as it were. The tropical fauna is represented in the Cincinnati zoological collection by a number of good sp ecimens, among others a pair of chimpan zees, called Mr. and Mrs. O'Hoolihan. Mr. O'Hoolihan is somewhat below the medium height and resembles the late Mr. Crowley, of New York. Mr. O'Hoolihan has a pale gray eye and John C. Calhoun whis kers. In politics he favors a republican form of government with a Democratic majority. Socially he is rather liberal, and would no doubt lead a double life if he had not been placed where his actions are constantly under the public eye, as it were.

A Scene for a Rembrandt.

One of the most touching pictures I have ever seen, I think, and one well worthy of the brush of a Rembrandt or a McDougall, is that of Mrs. O'Hoolihan on a Sabbath morning fussing around among Mr. O'Hoolihan's John C. Calhoun whiskers with a fine comb. Mr. O'Hoolihan favors the election of Senators directly by the people, and also urges that in this day of popular prices for good entertainments seats in the Senate are too high. He would favor making them 10, 20 and 30 cents. Mr. O'Hoolihan also favors the free and

unrestricted coinage of silver, together with a more rigid rule regarding its absorption who already have some those theory is that the Government should offer a certain percentage of premium to those

who now have money, and by that means ascertain truthfully what amount each citizen has. Then it should announce that it had made a slight error as to the meaning of the law, and turn right around with what silver it has and what it can

coin by means of a new brick and tile machine which will make money as fast as a big factory can make carpet tacks, and even up the whole thing so that all mankind may start in square again. Mr. O'Hoolihan favors also the apportionment of brains in the same way, if possible, other-wise the able men would fool the other folks out of their money again in a week, and all this apportionment would have to be gone through with again. He does not know yet very fully how he will even up the gray matter business, but he thinks it

A Socialistic View of Brains

irl, until all were married in this way. Large families of children were born to all these unions; so that at last accounts, there were 39 Rheaume children in the third generation, and 35 Morin children. These 74 children, living in one village, distant when the man who knows too much may be made to "whack up," as it were, with the mental pauper. Proper officials will go around with a brain tester for people to are, therefore, of a degree of relationship nearer than cousinship: they are what is known as "double cousins." This relationship is not of unusual occurrence; but so great a number of "double cousins" livthink against, and by means of a graduated scale the official can tell whether a man knows more or less than the law allows.

of clerical etiquette and the statutes in such case made and provided.

A Pastor Breaking the Sabbath

Fire, however, had broken out in the hotel near by, it seemed, and so in the midst of his eloquent and fearless battle against these vices he broke off suddenly to aid in saving property. He formed a bucket brigade, and aided by the four other pastors, who had also hastened to the scene, a line of pails soon extended from the near-est pump to the ladder running up the side of the building. For hours the good man fought the flames

without ever pausing for breath. The hook and ladder company did the swearing while he carried water. They pulled down ivy vines, ate hotel pie, filled the air with imprecations and ever and anon rolled up their sleeves to see if their muscles had rown any since they had last examined hem.

Finally, seeing that the hotel could not be saved, and that a little cottage near it was threatened, the pastor said: "Let us save this little home at least. Put blankets on the roof and keep them wetted. Work with a will, boys, and we may save this ittle 'cot' even though the hotel perish."

He Had Saved a Speak-Easy.

Finally, after hours of struggle in the choking smoke and heat and discourage ment, the flames died down and, surrounded by ruin and wreck, the little house stood by itself safe and unscathed. The pastor vent in to see if everything still remained unharmed and to receive the thanks of the ccupants. There was no one there, but or the table, face down, were four unusually good hands, running all the way from the straight to the bobtail flush, while in the center of the table stood the tempting jackpot, and near by, on a sideboard, a tall re-ceptacle with willow environments containing spirits, arranged and dramatized by

a gentleman named Pepper. The cottage was what is called in that country a "Speak-Easy." A "Speak-Easy" is not a moral place.

The pastor put on his coat and princess vest and went home, and as he went some one heard him say: "Whoso is simple, let one heard him say: "Whoso is simple, le him turn in hither. He that reprove ha His scorner getteth himself shame, and he that rebuketh a wicked man getteth himselt a BILL NYE.

MONKS POSSESS THE SECRET.

They Manufacture Benedictine Liquor and Thus Increase Their Income.

The liquor "Benedictine" is distilled vithin a monastery in France by monks (who alone possess the receipt), much on the same principle as that of the Great Chartreuse, to which the Benedictine has a great resemblance both as to color (to the yellow Chartreuse, not the green) and taste. Its greatest property, and perhaps the secret of its unique flavor, lies in the excellent quality of the very old brandy used in its distillation.

The bottles are of a peculiar and special shape and manufacture, and every precau-tion is taken to prevent imitations of the quor for which the Benedictines of Fecamp are notorious, yet not withstanding their vigilance, imitations are made and sold, but the Benedictine" still continues to increas the already large fortune of the diligent and persevering monks at Fecaup.

How the Baz ar Is Worked.

Do you know how a bazaar works? The principle is a very ingenious one. Some adies borrow money from their husbands buy materials and make up fancy articles, which they send to the bazaar. Then they knows more or less than the law allows. In this way the smart Aleck who knows the articles back again.

takes the other top sheets and adds them one by one. Then he commences on the to with rapt attention, for his language was next row and works across, and so on, until as powerful as it could be without violation he has the whole 28 the start of the sta he has the whole 28 sheets in place, and shows you a large picture in which you can not distinguish the joints save by very close inspection.

The bill poster is very matter-of-fact. He does not care whether it is Shakespeare or farce comedy that he is illustrating. All he cares for is to do his work in a near manner, so that no one else in the business can criticise, and then let who will admire the subject of the bills. That is no concern of his. It is not an uncommon thing for ill posters to be actually unable to read, but they never make a mistake in putting up a bill. Their system is too good for

It Takes Skill When It's Windy.

It takes long training to make a bill poster. When a sheet of paper is pasted it has a miserable knack of sticking together in folds and tearing at awkward moments unless it is haudled with professional skill. Especially is this true on a windy day, when it is only by allowing so much for wind, and it can be safely affixed to the board. But the old hand knows all about this, and he will put up a 28-sheet stand in a gale of wind without a mistake, while pedestrians can hardly keep their feet, and are obliged to hold on their hats with both hands.

In posting for a theater the bill posters commence Thursday morning to cover the boards in the outskirts of the two cities, and work in toward the center, so as to finish by Saturday afternoon. The managers of the attractions at the theaters desire to have their paper shown as long as possible, but it is recognized as the professional thing for bill posting to be done in this way, so that each attraction gets the same length of show-ing on the bill boards. The three-sheet bills that are posted at the entrance to theater are covered with the announcements of the shows for the next week as soon as the performance has commenced on Saturday night. It is supposed that by that time the current of attraction has drawn about all the patronage that will fall to it, and the next week's

show is entitled to the boards.

Utilizing All Available Space The experience of bill posters enables them to tell at a glance how big a bill they can put in a certain place, and it is inter-esting to see how they will fill all the available place with odd sheets that fit in. A 28-sheet stand has been put up, perhaps, and there is still a space at the side about four feet wide. Up goes a three-sheet bill in the space, consisting of a picture or a well-worded announcement of the merits of the show, and that much more advertisement is secured that would be lost but for the torethought of the bill poster.

There is a great deal of rivalry between theaters over securing space in windows and on temporary piles of building material, lumber, etc., that is not in the hands of the city bill posters. If a store is empty for a lew days the owner is besieged by the advertising agents of the theaters to give the use of his show window for the lithographs and show bills of the attractions. metimes he divides his window, giving half to one theater and half to another, more often it all falls to the house whose agent has been quickest in getting the ear of the owner. Then comes the struggle. The brilliantly colored paper is put in or Saturday night, so as to make sure of that much-prized advantage, a "Sunday ing." On Sunday, especially if it is a bright day, there are thousands of people on the streets who spend their time in factories, mills, stores and offices all through the week. They are walking about on Sun day for recreation, and they derive a good deal of it from the study of the show bills with the result that they will most likely patronize the attraction that has caught their fancy in the lithographs.

Wear a Gay Dress on Sunday. Fifth avenue, Smithfield street, Sixth street, and other prominent downtown

IF THE EABTH WOULD STOP

The Convertion of Motion Into Heat Would Burn Up Everything.

The globe revolves with a surface speed which varies from a little over 1,000 miles an hour at the Equator to nil at the Poles. It is now an accepted axiom of physics that heat and motion are convertible terms, and that all motion suddenly arrested is in-

stantly redeveloped as heat. The diurnal motion of the earth trans-lated into heat would raise the temperature of the whole globe above the point at which its sens would evaporate, and even its surface materials become liquified if not reduced to vapor. But beyond this it is probable that the molten matter beneath the crust would, by virtue of its semi-fluidity, burst through the thin, melting envelope and overflow the ruins of the world. In a word, the sudden stoppage of the earth's diurnal revolution would mean an equally sudden return of primeval chaos.



The French Canadian people are famous for the size of their families, and for the inricacy of their family relations. Every me in a given neighborhood is quite sure to

be related in some way to every one else. A surprising illustration of these characteristics is found in the village of St. Marie de Beauce, in the Province of Quebec. can be done.

He claims that when surgeons are able to open the skull of a foolish person that has failed to grow, thus giving room to the brain so that the idiotic, by having a gore or a gusset put into the skull, have been able to almost think inside of a week, whereas they formerly did not know enough to ache when they got hurt, he thinks the day is not far