HOW PEOPLE SLEEP.

Some Interesting Dream Statistics Gleamed by a Russian University.

An interesting investigation upon the above subject has recently been made under the auspices of the University of Dorpath, Russia. Some 500 circulars were sent out with a series of quite definite questions, which were answered with equal detail by 151 students, 113 other males, 142 females. The result for the two sexes were so different that they demand separation, while the students formed a homogeneous class interesting as a special study. The first problem that was proposed was the relation between the frequency and the vividness of dreams. It appears that 62.5 per cent. of those who dream every night dream vividly, 60 5 per cent. of those who dream frequently, and 26 8 per cent. of those who dream seldom, showing that the vividness of dreams increases very rapidly with their frequency. Next, how is the intensity of sleep related to the frequency of dreams? Of the students who dream nightly, 68 per cent. have a light sleep (and only 28 per cent. have a deep sleep); of those dreaming frequently, 40 per cent.: of those dreaming seldom, 32 8 per cent. Similar percentages for the other males are 68 8, 42 1, and 39 3 and for women, 72 46 and 50 per cent. We conclude, then, that frequent dreams are a concomitant of light sleep, though the relation is far from universal. As regards sex, women have 73 per cent. of their number

DREAMING NIGHTLY

or frequently, while students have only 50 per cent. and other males 48 per cent. Again, 63 per cent. of the women sleep lightly and only 42 per cent. of students, and 44 per cent. of other males. We conclude, then, that women have a very much lighter sleep than men, and that their dreams are proportionately more frequent.

Another conclusion the evidence of which is too detailed at present, is than as we grow older our dreams become less frequent, but our sleep becomes lighter, age affecting intensity of sleep more than frequency of dreams.

The author regards the students as in the period of maximum dreaming (20 to 24 years of age). The deep sleep of childhood (hostile to frequency of dreams) is then least counter-balanced by the lessening of dreams due to age. The vividness of dreams shows a similar relation to age and sex: the women dream most vividly; the students, being younger than the other men, have more vivid dreams. The power of remembering dreams is also dependent upon vividness and frequency of dreaming; it is accordingly greatest in women and greater in students than in more mature men. The liveliness of

THE EMOTIONAL NATURE,

a prominent feature of women and youth, seems thus to be marked out as the causative agent in the production of dreams. The duration of sleep should naturally be related to the habit of dreaming, but in the men no such relation can be discovered. In the women, however, it appears that those who dream frequently sleep nearly an hour longer than those who seldom dream. This difference is regarded as due to the fact that men are more under duty to break short their sleep and thus vitiate the statistics. This is corroborated by the frequency with which the men who dream frequently declare themselves tired in the morning, indicating incomplete sleep.

The need of sleep is greater in women than in men, the duration of sleep being longer and the percentage of tired morning and evening and of not tired being 3 to 2 and 2 to 3 respectively as compared to the men. Students sleep longer and are less tired than other men. The time needed to fall asleep is about the same in all three classes—20 8 minutes for the men, 17.1 minutes for students, and 21.2 minutes for the women. In each case, however, it takes longer for those who are frequent dreamers and light sleepers to fall asleep than perons of opposite characteristics. Eight per cent. of students sleep uninterruptedly through the night, 70 per cent. of other men, and only 43 per cent of women. Light sleep and frequent dreams increase the interruptedness of sleep. The power of falling asleep at will is possessed by few. It is greater in youth than in age. Twenty-eight per cent. of men, 19 per cent. of students, and 20 per cent. of women sleep in the afternoon, indicating a making up of insufficient sleep on the part of the men.

The effect of dream habits upon mental work is also evident.

THOSE WHO DREAM SELDOM

or sleep deeply, are better disposed for work in the forenoon than light sleepers and frequent dreamers. The forenoon seems in general to be the preferred time of work. The statistics regarding nervousness confirm the accepted fact that this is greater among students than other men at large. It is, too, a concomitant of light sleep, and frequent dreams. As to temperament, the phlegmatic people are quite constantly deep sleeping and infrequent dreamers. Finally, a contrast between teachers and professors of the same average age shows the effect of the occupation. The teacher with his daily toil, has a lighter sleep and more frequent dreams, while the professor, leading a comparatively congenial and worriless life, is a deeper sleeper and a less frequent dreamer than the teacher.

Playing Pious Before His Majesty.

The Emperor of Russia, when upon a tour of inspection in the provinces, passed the night in the simple hut of a toll-taker. Before retiring he was pleased, as head of the Church, to see the old man take up the Bible and read a chapter. "Do you read often, my son?" he asked. "Yes, your Majesty, every day." "How much of the Bible have you read, my son?" "During the past year, the Old Testament and part of Matthew, your Majesty." Thinking to reward him, the Czar placed 500 roubles between the leaves of the book of Mark, on the following morning, unknown to the toll-keeper, whom he bade farewell. Several months passed away and the Emperor returned, upon a second tour, to the toll-taker's hut. Taking the Bible in his hands he was surprised to find the 500 roubles intact. Again interrogating the toll keeper as to his diligence in reading, he received an affirmative answer, and the statement that he had finished the chapters of Luke. "Lying, my son, is a great sin," replied his Majesty; "give me the Bible till I see." Opening the book, he pointed to the money which the man had not seen. "Thou hast not sought the Kingdom of God, my son. As punishment, thou shalt also lose thy earthly reward." And he placed the roubles in his pocket, to distribute afterward among the neighboring poor.

The Art of Jelly Making.

There are jellies and jellies. Ordinarily it is safe to pass by the rasping sweetmeat whose taste is lost in sugar, or is a sharp acid, with a decided flavor of the pan in which it was made. You can taste the tin or metal in most of the jellies and fruit preserves shown. A few times in life, however you come upon such a glass of jelly as I found in a Pilgrim household, at old Plymouth—wild grape jelly, kept three years in a pot of old gilt crystal, which perfumed the house when opened with its wild, fine odor. Jelly-making is an art, the height of the housekeeper's skill, for it demands keen taste, nicety and promptness to insure perfection rather than the twenty minutes' boiling and the pound for pound of sugar which most women imagine all there is of jelly-making.

To have the soul of one fruit in its flavor, it must be picked in its first firm ripeness, just when the dew is dry on a sunny forenoon, about ten minutes from the boiling pan. The stoneware preserving pans are best for all fruit uses, and a kerosene stove, with an iron stove-lid under the pan, works quickly, without overheating jelly or jelly-maker. Only a quart of juice should be pressed at a time, and made up as quickly as possible. Standing, it loses flavor and develops sharp ferment, which gives the edge to so much of the jelly offered. Everything must be scrupulously clean, and a bowl of clean water ready for rinsing spoons and cups.

The finest jellies are made without heat. A sunny day before a storm, when the tea kettel boils away fast, is the best day for boiling jelly as the juice evaporates faster, but jelly by the cold process needs fair, settled weather. A damp, muggy day is enough to spoil any preserves made on it. Use the best confectioners' sugar for jelly, or roll and sift the granulated until it is fine and will dissolve quickly. Have the sugar measured and glasses ready before pressing the juice. Press and strain through flannel, without squeezing or stirring, but moving the juice to fresh parts of the straining cloth, as it becomes clogged. On careful straining depends the crystal clearness of the jelly which is read of, alas! oftener than seen. Repeated straining lessens the flavor. What remains on the cloth should be scraped off for marmalade, but jelly requires the first run of the fruit. Use three-fourths of a cup of sugar to a cup of strained juice, stirring spoonful by spoonful into the bowl, and continuing to stir till the sugar is entirely dissolved—ten to fifteen minutes. Then pour into glasses and set in the full sunshine. A table on an open porch, or a broad shelf outside the window, is the best place, covering each tumbler with one of the small squares of glasses that come in honey boxes. In time moisture gathers on the underside of the glass, and it must be turned and wiped dry, changing the position of the jelly to keep it always in the sun. Sometimes it must be exposed for a week before it comes firm. But usually two or three hours is enough, and the juice jellies on the edge of the bowl before pouring out. The flavor of fruit is kept in full freshness by this method, and the jelly is not so likely to mold as when boiled. When thoroughly firm, lay disks of white paper cut to fit the glass, dipped in salad oil and drained, on the top of the jelly, and cover with tin covers or paper brushed on both sides with white of egg or the thick water of boiled rice. Keep all preserves in a dry, cold, dark place, away from other provisions.

For boiled jellies, set the boiling rapidly, and sift in the heated sugar, spoonful by spoonful, not to check the boiling, using equal care neither to scorch nor cool the fruit. The best manufacturers say the secret of high flavor is to keep fruit boiling as rapidly as possible till the juice is evaporated enough to jelly, which should be ten minutes, but in domestic methods is twenty. The only way to tell when it is done is to drop a little on a cold saucer, to see if it thickens. Then take it off, cool in a draft, and pour into dry, clean glasses, which seal as before. Powdered sugar on the top protects from mold as well as the oil paper, and paraffine paper, closely fitted, may be used in place of the latter. More care should be given to secure variety of flavor and fruits for jelly.

Apple jelly is fine if made from high-flavored, acid, white-fleshed varieties, like the Orange Pippin, or Bel flower, boiling the skins and seeds, tied in cheesecloth, with the juice, which heightens the flavor. For the finest jelly, press two quarts of cider and put in to simmer: pare five pounds of apples, slice and boil in the cider over a brisk fire till the fruit is melted down; strain and boil again with ten ounces of sugar to the pound of juice. This may be flavored with lemon being required for the above amount of apples—or with quince.

The quince itself is at the head of fruits for preserving, and should be boiled with all the seeds and clean parings to get its high flavor. The Japanese quince is esteemed as a jelly fruit in Southern States, where it fruits freely.

Wild grape jelly is the finest known if properly made, by cooking the whole grapes in a stone pot in the oven before straining. White currant jelly is delicious. Cherry jelly is piquant in the highest degree, but should be cooked without stirring the fruit. Barberry jelly is valuable for consumptives as well as a high relish for game. Boil four pounds of picked barberries in three quarts of water until soft; strain and boil with ten ounces of sugar to the pound of juice. Pine-apple jelly is one of the whitest and clearest kinds, admired for a luncheon treat with ice cream. Green gages make a subacid jelly, very pleasing to serve with cake at an old-fashioned tea.

Capital Punishment.

Teacher, describing experiences of the day to a friend:

"In order to punish Johnny Hansom I caused him to sit beside Miss Fresh, the prettiest girl in the school."

Friend—"And how did it work?"

Teacher—"Judge for yourself. The girl did not seem a whit disconcerted, and smiled so sweetly upon Johnny that he lost his head completely."

Friend—"Why, that was capital punishment."

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Meteors as Big as Flour Barrels.

The Baltimore *Sun* says:—Dr. S. T. Perkins, of Springfield, witnessed the fall of meteors on Wednesday night in Prince George's county. "The night was quite dark," he said yesterday, in describing the phenomenon, "and the sudden flash caused by the shooting meteor was startling. A huge glowing mass seemed to descend from the heavens at an angle of forty-five degrees. It was an irregular mass about the size of a flour barrel, and of great brilliancy—a glowing red heat. The country for miles around was lit up for a few seconds. It seemed to fall about one mile to the south-west of Bowie. As soon as I regained my equanimity, for the wonderful sight took my breath and elicited a scream from my wife and children, I looked at my watch. It was 8.30. The second meteorite fell about forty minutes later. It was even larger than the first and much brighter. As near as I could judge, it fell about two hundred yards from the first I have seen meteorites fall before, but none so bright as this." The people of Bowie had much the same story to relate. Everyone for miles around thought it had fallen but a few hundred yards from his farmhouse. Capt. Edward Leonard, of the steamer Ida, reported having seen a meteor on Wednesday night as the steamer was going up the Tread Avon river to Eastern Point. During the passage of the meteor the sky had the appearance of a solid sheet of fire.

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