

SCIENCE AND INDUSTRY.

The London Hospital, referring to the introduction of lace-making in a... The exporting of American shoes...

Wood yarn, as now manufactured in Germany, is said to cost about half as much as cotton yarn...

The so-called "waiting mice" of China and Japan have been supposed to owe their dancing peculiarity to disease of the inner ear...

Recent investigations by two physicians of Rome as to the depth of sleep have been carried on by means of an instrument called an "ethiometer"...

The production of iron ore in France is centered principally in three districts—that of the northeast, or the Maurellet-Moselle...

Oil fit for fuel purposes has the following chemical composition: Carbon, 86 per cent; hydrogen, 10.71 per cent; oxygen, 1.23 per cent...

SAYS BRITISH ARE UNDERFED.

Mr. J. Crichton Browne, M. P., declares that the British are underfed...

Thirty per cent of the population of Great Britain is underfed. Such is the declaration of Sir J. Crichton Browne, M. P...

The conquest of South Africa is complete, the empire is in a state of peace, the king has recovered from a dangerous illness...

He finds that even in the rural districts the food habits of the masses are calculated to prevent boys from growing up into useful material...

"My observation leads me to believe," says the distinguished medical authority, "that the masses are improperly fed as well as underfed..."

"When we turn to the townsfolk we see in the anaemic faces, the lack of sound teeth and the stunting of bodies evidence of deterioration due to misuse of food!"

In the factory town of Dundee boys, between the ages of 11 and 12 years were found to average ten pounds under weight and nearly four inches under height...

Greatest of All Causes. No sport ever became a mania of the proportions of cycling. Six years ago wheelmen were a guild with political power...

Good Cause to Worry. "First Missionary You look worried. Second Missionary—I am worried. What about?"

THE USE OF OIL FUEL

Discovery of New Wells Will Increase It Very Largely.

Coal Will Be Displaced to a Great Extent on Ocean Steamers and in Many of the Commercial Works.

The discovery of new sources for the supply of fuel oil has reawakened the possibility of using it in Atlantic liners and other high speed vessels...

Oil fit for fuel purposes has the following chemical composition: Carbon, 86 per cent; hydrogen, 10.71 per cent; oxygen, 1.23 per cent...

of oil are equal to 37 cubic feet of coal as ordinarily stowed in bunkers. This increases the radius of action of a war vessel 80 per cent...

MAKING FARMS IN NEBRASKA.

Agriculturists Catch New Land by Means of Dams and Prevent Soil from Being Washed Away.

Farm building is the latest vocation of the Nebraska farmer, says the Chicago Inter Ocean. After the harvesting of the crops thousands of farmers in eastern Nebraska will spend weeks in the construction of dams...

Lewis C. Burnett, of Otoe county, in a published letter, insists that the impairment of the soil in this manner this year far exceeds the loss caused by the drought of last year...

It is agreed by the experts that the only way to save the black soil for Nebraska is to build dams that will catch the sediment before it goes into the Missouri. This is comparatively expensive, but involves a great deal of labor...

By a creek which empties into the Missouri, Charles Clayton, of Syracuse, has a 400-acre farm which he "built" by the use of dams...

PUNGENT PARAGRAPHS.

Penurious Maid.—"He made her an offer of his hand." "Did she accept?" "No. There wasn't enough in it."—Philadelphia Bulletin.

"What did you get out of your garden this year?" "Not a day went by that I didn't have one of my neighbor's chickens for dinner."—Town Topics.

A Benefactor.—"But has he ever done anything useful?" "You bet he has. He's the man who invented the new stroke in polo."—Cleveland Plain Dealer.

Went Them One Better.—"Did her father forgive her for running off and getting married?" "Yes, the old man said that he would forgive and forget them."—Indianapolis News.

Humoring His Customers.—Prof. Von Note—"You had a nice collection of classic music here." Music Dealer—"That's for young ladies to look over previous to asking for a copy of 'The Honeyuckle and the Bee.'"—N. Y. Weekly.

In Trouble.—"Alas, alas," he cried, "if only my three girls had been boys." In truth, he was in sore trouble, with three young men trumming three banjos and singing three different love songs under three windows at one and the same time...

KING PARDONS OFFENDERS.

Magdian's Ruler Did Not Allow His Illness to Delay This Part of Coronation Plans.

Throughout his grave illness, except, of course, when he was at his very worst, King Edward never lost his interest in any of the schemes associated with his coronation. One of these concerned the pardon of a certain section of military offenders...

An appeal, I learn, says the London correspondent of the Washington Star, is to be issued by the war office to the large employers of labor in behalf of the men who are returning from South Africa...

MEDIAN AGE INCREASING.

Report of Census Bureau Showing Population Comparisons by Decades.

The census bureau has issued a statement showing the increasing age of the population from decade to decade. The statement gives the results of computing the median, instead of the average age...

The median age of the total population in 1900 was 22.8, as compared with 21.9 in 1890. The median age of the white population in the last census year was 23.4 and the colored, including negroes, Indians and Mongolians, was 19.7...

The report shows there was an increase in the median age of the white population during each decade from 1810 to 1900 amounting in the 90 years to 7.4 years, or an average amount of about five-sixths of a year in a decade...

The median age of the colored population increased after 1830, but with less regularity. The median age of the colored population increased three years in the 70-year period from 1830 to 1900, or only about half as fast as that of the whites...

The statement concludes as follows: "Many complex influences have cooperated in producing as a resultant this steady change in the age composition of the population. Three may be mentioned, the rapid progress of medical and sanitary science, which has tended to increase the average length of life..."

"The difference between the white and colored populations is doubtless due to the fact that the influences have wrought more powerfully upon the white race than upon the colored."

LATEST GREAT SEAL.

Government Documents to Be Embellished with New Design.

Will Be the Fourth in Use by the United States Since the Declaration of Independence—History of the Seal.

One of the smaller appropriations, but one of the most interesting, made by the recent congress, was one of \$1,250 for a new great seal of the United States. Secretary Hay said the old one was worn out; that it no longer made the proper impression, and that he must have a new one...

This will be the fourth great seal that has been cut for Uncle Sam, each one practically reproducing the last in design and being cut to replace one that had worn itself out in the service of the country. The first was cut in 1782 and was used not by a secretary of state, but by congress...

The act of congress which created the department of state on September 15, 1789, also authorized the use of this old congressional seal and gave it into the custody of the newly-created secretary of state. It continued in use until 1841, when a new one was cut for Daniel Webster, secretary of state under Tyler...

The new seal now cutting will have 13 olives on the olive branch, and word has gone out that the eagle's claws will be turned forward, not back, as they have in the old seal...

It is interesting to note that the first seal lasted nearly 60 years, the second 43, while the third has lasted only 17. This wearing out of cut steel bears eloquent testimony to the increase of Uncle Sam's business, and it is fair to conclude that the seal now being cut will hardly last a decade...

Big Price for Old Stumps.

Old walnut stumps are on a boom throughout Tennessee. Stumps that have remained unnoticed for years and were regarded as worthless are now eagerly sought after prices that seem almost fabulous...

Rare Staircase Discovered.

During the progress of the present restoration of St. Patrick's cathedral, Dublin, the remarkable discovery was made that underneath the plaster of the time of William and Mary real and beautiful thirteenth century stone-work had lain hidden for generations...

SWIMMING HOLE TALK.

It Made the Prosperous Looking Man Change His Mind About Going to the Seashore.

"All this 'old swimming-hole' talk is inclined to make a man homesick," said one of the prosperous looking group who were being served with cooling liquids by an ebony-hued waiter...

"When it first popped up in the Esquire several weeks ago I had it all fixed up to take a belated flyer to Cape May or Atlantic City. But I didn't. I caught sight of that swimming-hole contest announcement, and it brought me back with a yank to certain days long ago when we didn't dare get our hair wet for fear we'd get a licking when we got home..."

A reminiscent smile stole around the board, and one man quietly ordered mint juleps for the crowd. It seemed the only appropriate drink at the time.

"Well, the more I thought it over the more the idea hung to me until at last I turned to my wife."

"Mary," said I, "didn't you say the other day we ought to go out and see my mother this summer? I thought so. Well, we're booked to start Tuesday morning."

"Say!"—and there was a far-away look in the big man's eyes—"did any of you fellows ever go back to the home where you lived as a boy and do all over again the very things you did when you were a freckle-faced, awkward urchin in knickerbockers? Well, that's just what I've been doing for three weeks, and I want to inform this squad that I've had just about the most scrumptious vacation I ever put in. I climbed all over the old barn that I once had to climb over looking for eggs and new hen's nests. I squatted in my bare feet—in the running water of the springhouse, and drank cool, sweet milk out of the crocks just as used to when I was a boy, but this time my own eight-year-old prodigy was there to help me. That prodigy was also with me whenever I sauntered down to the creek in the evening, both of us peeling off our clothes as we walked along. The youngster enjoyed it, but his delight wasn't one-two-six with that of mine as we splashed about in the water or paddled around in the dug-out that has done duty at that particular spot for so many years...

On the banks of the creek near by I found the beech tree I had carved my initials on when a lad at that school, and the initials were still to be seen.

"When the gloaming began to gloom the kid and I would return from these wanderings and stretch out in hammocks on the big, old-fashioned porch, where all the rest of the family would be gathered. Along about nine o'clock mother would bring us—perhaps a pitcher of milk from the springhouse, with gingerbread to accompany it; or, maybe, it would be a watermelon that had been suspended in the well that day—not as cold as ice, but mightily near it; or, again, it might be a basket of harvest apples that, red-striped and delicious, lay under the trees of the orchard. Anyway, it would be something good that would be waiting for us at bedtime. The prodigy and I together occupied a great, old-fashioned four-poster, and when we had retired to it mother would come to see if we were comfortable and kiss me good-night just as she used to—and just as the kid's mother does with him nowadays."

"Well," added the big man, as he noticed that his audience seemed willing to stand for more, "that will be about all. I merely want to remark that I've been to the ocean beaches, where they have artificial lights and live artificial lives, but when vacation season comes next summer I'm going right back to the old home and drink milk out of the crocks and wade in the creek."

The big man left an opening for some comments, but the whole gang seemed absorbed in deep thought, and nobody said a word for ten minutes. Even then it was only a jerky order for four more mint juleps.

Unfamiliar Feet.

Railroad accidents, so fruitful of tragic incidents, are also occasionally productive of bits of humor, although it is not often that the humor finds a place in the newspaper reports of the accident. One amusing incident is reported of a woman to whose care a young man had been intrusted after he had been badly hurt in a collision. He was unconscious when he was carried to her house, and did not open his eyes or speak for some time. His first conscious moments were evidently full of bewilderment. He looked at the room, and finally let his eyes rest upon his bandaged feet. He looked at them long and carefully. A puzzled frown slowly gathered on his face. With a feeble finger he pointed toward the foot of the bed. "Those are not my feet," he said. "My feet had russet shoes on them."—Youth's Companion.

Children's Sayings.

Arthur—aged three—had a marked fondness for a dilapidated Skye terrier belonging to a neighbor. When his sister was about to drive the dog away he remonstrated: "We never saw a gooder dog than Johnny Beckwith am. are we Grace?"—Woman's Home Companion.

Cetism.

Sidney—How do you like "Bellida Bubble of Bubbleville Hall?" Rodney—Oh! It is a novel which will captivate all those people who move their lips when they read—Puck.

MOST USEFUL SCIENCE.

To Mathematics Is Accorded the Foremost Place of All.

Considered the Most Indispensable to the Well Being of Humanity—Relative Values of the Other Sciences.

The question: "What is the greatest of all sciences?" has been repeatedly asked, but never satisfactorily answered. Nobody knows. The question is similar to that raised in the ancient fable of the lips and the tongue, in which each claimed that it was the most important organ of speech. The tongue told the lips that they were useless without it, and bade them open and see if they could talk alone. The lips claimed that they were the most important, as the tongue could not talk while they remained closed. So with most of the sciences—they are so interdependent on each other that they are nothing alone, states a scientific authority.

What is the greatest science? Chemistry? Physics? Mathematics? Astronomy? The natural sciences? Geology? Paleontology? It is obvious those sciences which are greatest, considered in the light of their indispensability to human happiness and well being, are those which are the most elementary, taking the word to mean simplicity of composition. The question, then, narrows itself down to "What sciences are the most indispensable to human well-being, and of those, which are the least complex and dependent on other sciences?"

Examining the claims of those mentioned above, it is obvious that astronomy, grandest of conceptions and treating as it does of matters so immense that the earth and all it contains seems insignificant beside it, is nevertheless made up of several other sciences. Mathematics are the very root and heart of astronomy, while optics (physics) is its means of expression. As chemistry and physics are also vital parts of it, speculation and theory are about the only parts of it not made up of other sciences.

The natural sciences can be skipped at once. It requires no argument to see that the world could dispense with them before chemistry or physics.

Chemistry, then, or physics, or mathematics?

Physics, the study of the phenomena presented for observation by bodies (which definition has been stretched to include the phenomena of light, heat, sound, electricity and magnetism), is so interwoven with mathematics that it is almost a part of that science. Chemistry, less dependent on the latter than physics, yet needs physics at every turn. And physics depends on mathematics.

But what do mathematics depend on? What science must be at hand and understood for a comprehension of the principles of the science of numbers, quantities, volumes, sections, movements? Not one.

To mathematics, then, should be accorded the place of the most indispensable of the sciences, a position fitting the one which among exact departments of knowledge is known as "The Exact Science," the branch of learning which antedates all others, and on which all others depend.

It would be idle to say that any of the great departments of human knowledge are greater than any of the others. All are colossal to the intellect, as they are pygmies to what they will be, but conferred by their usefulness, their indispensability, the science of quantity, mathematics, stands at the head of the list, uncrowned king among a domain of subjects as great as they are dependent.

BULGARIAN PEOPLE.

The Men Are Farmers or Soldiers and Make Their Women Slave in the Fields.

It is a strange country of contrasts, this Bulgaria that people have so long watched as a danger spot. The peasant is a heavily built fellow, with a Kalmuk nose, if he happens to be pure bred from the original Samoyede stock, which is not likely. His language has become Slavic, which means a language in which "beef-steak" is "mpiphteki" and "omelet soufflé" is "omelet cuphie." The Bulgarian is a peasant or a soldier; he knows no other trade. As a farmer the sheep is all in all to him, food and clothing and companionship, says the Era. He lives in a hovel, does not understand why he should be taxed and makes his women slave in the fields. He is called close-fisted, churlish and suspicious, and has some of the virtues that often go with those qualities. When Bulgaria became practically free from the sultan there were many Turks left in the country. These are gradually being crowded out, but there is still a mosque in Christian Sofia, and in the palace of the sultan's or parliament, where the members have better accommodations than the lords of Britain on the Thames embankment, some 20 Turkish deputies always sit together and exert an influence that they never could do in their own land by voting always with the party in power. Every Saturday the members of the sultan's are paid at the rate of 15 francs a day, all in silver five-franc pieces. These peasant lawmakers knot it up in handkerchiefs, grin slowly and shake the jingling pieces playfully in one another's faces. They are playing at statesmanship yet but fairly well on the whole.