

RAPID PROGRESS IN SURGERY.

Skin-grafting is no longer novel, and bones are successfully transplanted.

The telegraph continues to note skin-grafting experiments as if they were novel. It is a long time since surgeons in any country hesitated to resort to skin-grafting whenever necessary. The only difficulties encountered now are in getting consent of healthy people to loss of cuticle and the perfect purgation of the transferred skin before attempted application on the victim of accident. Skin-grafting is going on everywhere in hospitals and private practice. Its next step will be to find the lower animal or animals that can be used for human beings' service as safely as human beings themselves. Bones of lower animals have been successfully introduced in whole or part into the human system. Man is being repaired in countless ways unknown to the profession a hundred years ago.

Danger in darning, if no longer novel, experiments of this nature arise not from the knife but from poisoning. Although science has scrupulously sought for protection against this peril it is always present, and, although pain has been allayed by cocaine, by ether and other means of effecting local or general insensibility, distilled water injected under the skin being the latest suggestion, science is unable always to guard against the possibility of inserting disease germs when undertaking to lengthen life.

Dr. Robert Carter, an eminent British authority, writing of this, has said that as to bacteria being the cause of many diseases investigation of the subject on the presumption of truth in the theory is only in its infancy.

"The whole question is only beginning to take shape and outline, and it would be useless to attempt to forecast conclusions which may hereafter be attained. Among the diseased conditions in the causation of which bacteria seem to hold a prominent place must be mentioned some of the consequences of septic or putrefactive poisoning by accidental or designed inoculation. It is extensively believed that such inoculation may be produced by the presence in the atmosphere, and, hence, by the introduction in the wounds of bacterial germs; especially when, as in hospitals, the atmosphere is exposed to contamination by matters proceeding from the bodies of the sick. The most recent researches, however, rather indicate that the injurious effects of germ inoculation and of consequent bacterial growth are not so much due to the presence of these bodies, or to any direct influence which they exert, as to chemical changes in the blood which they serve to originate and which may afterward be continued independently of them."

Here lies the problem that confronts the medical profession in its first period of experiment in making animals of different species or even the same useful in repairing injury in other animals. Although local impairment may apparently be remedied, essential danger may be implanted with the very remedy that promises only healing.

The discovery of anesthetics by Sir Humphrey Davy, first published in 1839, was really the beginning of the new era in surgery. Bacteriology has come in with the experiments of Pasteur and others, but while new anesthetics have been found, the germ hypothesis remains practically where Pasteur left it, and even his demonstrations are by no means final of convincing. The old reckless fashion of cutting off a quarter of a human being whenever he injured his knee or scraped his elbow, and of bleeding him to death whenever he drank too much claret or permitted his temper to get the better of him, has given way to conservative surgery that is able to restrict the injury within a narrow area and not only avoid removal of uninjured parts of the body, but even replace with cleanly tissue that which has been taken away. This is rational and humane art. Surgery, next to electricity, has made the greatest strides of useful sciences within fifty years. But it is not yet certain that, while vastly better equipped for preventing disease and conducting restoration, it is secure from the deadly danger of communicating disease.

Microscopic power is not sufficient to insure the surgeon that the skin, bone, or blood he is going to transfer is pure both at the time of transfusion and for all time. An instrument bearing the same relation to secluded germs in tissues under consideration for such uses that the ophthalmoscope has to treatment of the eye will doubtless be among the inventions of the next quarter century, and it is not improbable that electricity, which is only beginning to be known in healing science, will contribute toward its invention and success.—Chicago Herald.

Perilous Feats Unchecked.

The terrible parachute accident at Bonny resembles the disaster at Leeds by which Higgins lost his life, and points its own moral. In the Leeds case, it may be remembered, a majority of the coroner's jury wished to add a rider to their verdict discouraging parachute descents as a means of public amusement, but they were outvoted, and everyone knows that Mr. Matthews refused to interfere with Baldwin at the Alexandra Palace. So long, then, as the public crowds to see such feats, so long, we suppose, will adventurous spirits be found willing to gratify that public; but they know the peril attached, and if for a fame which is questionable they choose to run the risk of dashing their brains out, that is their affair. All the same, we fail to see why the police, as in Dublin recently,

should prevent a daring swimmer's diving from a bridge and refuse to interfere with the far more dangerous pastime of the parachutist.—Pall Mall Gazette.

Kansas "T. C.'s."

The "History of the University of Kansas" whispers in the public ear an account of certain practical jokes, which from time to time enlivened gray scholastic days. At one period a secret society suddenly broke into being. The boys composing it wore a badge consisting of the letters "T. C.," at least two inches long, wrought out of new tin. No one could guess what the object of the society might be, until it became evident that turkeys were mysteriously disappearing from various localities.

Thus the matter ran on until, in an unlucky hour, the boys raided the poultry-yard of Judge Nelson Stephens. Now the Judge was not a man to be trifled with; he soon detected the rogues and resolved forthwith to punish them in his own peculiar way.

Without mentioning his discovery outside his own family, he politely invited all the "T. C.'s" to supper. They were delighted with the invitation and accepted it forthwith. The Judge received them most cordially, and kept them in a room with funny stories until supper was announced. Still shaking with laughter, the guests were shown into the dining-room and assigned their places.

On the plate of each "T. C." was a huge turkey! The Judge begged them to help themselves, and went on with his funny stories, as if he were accustomed to serve guests with whole turkeys every day in the year.

The boys were in torture; they could neither eat nor listen. The Judge, however, too polite to notice their embarrassment, simply urged them to eat, and kept on with his stories. Thus did he "roast" the boys as thoroughly as they had ever roasted his turkeys.

That very night the disconsolate "Turkey-Catchers" disbanded, and their badges were seen no more.

Japanese Myths.

No people in the world, civilized or savage, believe in the existence of so many mythical, half-supernatural creatures as do the Japanese. For instance, they think there is a wondrous tiger of more than half-human intelligence that lives to be 1,000 years old and turns as white as a polar bear. They also believe in a species of fox, if it lives to be fifty years old without having been chased by a dog, transforms himself into a beautiful woman. This same fox, if he lives to the age of 100 years, gains some new powers, among which is that of becoming a wonderful wizard. When he reaches the age of 1,000 years he becomes a celestial fox with nine golden-colored tails and has the power of going to Heaven whenever he chooses. They also believe in a multitude of animals distinguished mainly by their monstrous size or by the multiplication of their members. Among these are serpents 800 feet long and big enough to swallow an elephant; foxes with eight legs; monkeys with four ears; fishes with ten heads attached to one body, the flesh of which is a cure for boils. They also believe in the existence of a crane which after it has reached the age of 600 years has no need of any sustenance except water. Their mythical dragon has the head of a camel, the horns of a deer, the eyes of a demon, the ears of an ox, the body of a serpent, the scales of a fish, and the claws and wings of an eagle.

A Paris Hobbers' Den.

A most extraordinary discovery has just been made by the police on the Boulevard Ornano. Two policemen on night duty followed several suspicious looking individuals who were carrying large parcels and were astonished to see them disappear as if by magic into the glaciis of the fortifications. They went up to the spot and saw a ray of light coming through a crack and heard sounds of laughter. One of them went off at once for reinforcements and as soon as other officers had arrived they raised a heavy trap door and went down a staircase cut into the earth into a large chamber, thickly carpeted, where five men and three women were carousing. The gas company were captured and taken before the commissary of police, who soon learned that they were professional thieves and that they had lived quietly for six months in the cave, which they had dug in the fortification. An immense quantity of stolen property was found.—Galignani's Messenger.

To the Point.

Frederick Bond, the actor, has a son who is a marvel of precocity, says the New York Commercial Advertiser. Like all proud parents he has a choice collection of anecdotes in which his offspring is the central figure, and the talented Lewis during the eight years of his earthly career has supplied his father with material for a large number of pretty good stories. His latest flash of juvenile brilliancy is in the shape of a letter written to his father while upon the read. It is one of the most absolutely direct epistles ever penned, and if all letter-writers followed the principle enunciated by the astute Lewis the saving in ink and paper per annum would pay off a large part of the national debt. Here it is:

"N. Y. Dec. 1 '91.
"Pa.—I write you as I have nothing to do. I close because I have nothing to say."
"Lew."

A CRANE in Washington the other day demanded the arrest of the Weather Bureau staff for dealing in futures.

WITCHCRAFT.

A Majority of the Citizens of the United States Believe in It.

Witchcraft is at the present time believed in by a majority of the citizens of the United States. The larger number of immigrants from the continent of Europe are more or less in fear of such powers. To these must be added no inconsiderable proportion of persons of English and Scotch descent; for a strong vein of superstition is discernible in many Irish, Scotch, and some English, whose "folk-lore," diffused in nursery tales and neighborhood gossip, has entwined itself strongly about the fibers of a spontaneous subconscious mental imagery. Among the more ignorant members of the Catholic Church of nationality the belief produces a mysterious dread, against which men and women cross themselves, and resort to various rites supposed to be efficacious.

Where colonies of immigrants have remained isolated, retained the use of their own language, the influence of witchcraft is more easily traced. The interior of Pennsylvania affords better illustrations of this, and on a larger scale than any other State. It has been but two or three years since suit was brought by a man against his mother, in one of the counties of Pennsylvania, to recover damages for a dog which he charged her with having killed by witchcraft; and he not only brought suit, but obtained judgment from a Justice of the Peace. Various witnesses testified as to their experiences in witchcraft, and only one said that he had never had a friend or relative who was bewitched.

In divers villages in Pennsylvania, some of them in the Dunkard settlement, are women who are supposed to be witches. Some are shrewd enough not to apply their arts for strangers, but to those whom they know, as stated in an article in the New York Sun some years ago, they will sell charms to ward off lightning from buildings, dry up the wells of the enemies of applicants, force cows to give bloody milk, cause sickness in the family, destroy beauty, separate man and wife, and reunite estranged lovers.

In the interior parts of the Southern States, where a large portion of the white population cannot read, and there is a little admixture of society, there are "witch-doctors," who, assuming that all disease is caused by witches, secure thriving practice in counteracting their influence. The Philadelphia Times, on the authority of a reputable correspondent, who gives many facts to sustain his representations, says: "For generations the poor whites have believed in witches, and the belief is deep-seated and incurable."

The African population brought this belief from the Dark Continent, and it persists among them to this day, though the progress of religion and education is doing something to check it.

I have recently noted in various parts of the United States more than fifty suits instituted by persons against those who they claimed had bewitched them; but under existing laws the accused could not be prosecuted except where money had been obtained under false pretense, or overt acts of crime had been suggested or committed.

During pedestrian tours in New England, in various parts of the West, and in every Southern State, I have frequently stayed for the night at the houses of poor farmers, laborers, fishermen, and trappers. In such journeys I have invariably listened to the tales of the neighborhood stimulating them by suggestions, and have found the belief in witchcraft cropping out in the oldest towns in New England, sometimes within the very shadow of the buildings where a learned ministry has existed from the settlement of the country, and public schools have furnished means of education to all classes. The horseshoes seen in nearly every county, and often in every township, upon the houses of persons suggested the old horseshoe beneath which Lord Nelson, who had long kept it nailed to the mast of the Victory, received his death wound at Trafalgar.—Century.

Thumb Impressions.

At a recent meeting of the Anthropological Institute Mr. Francis Galton, F. R. S., exhibited a large number of impressions of the bulbs of the thumb and fingers of human hands, showing the curves of the capillary ridges on the skin. These impressions are an unerring mark of the identity of a person, since they do not vary from youth to age, and are different in different individuals. There is a statement that the Chinese—who seems to be credited with every new discovery—had used thumb impressions as proofs of identity for a long time, but Mr. Galton pronounced it to be an egregious error. Impressions of the thumb formed, indeed, a kind of oath or signature among the Chinese, but nothing more. Sir W. J. Herschell, however, when in the Civil Service of India, introduced the practice of imprinting finger marks as a check on personation. Mr. Galton's impressions were taken from over two thousand persons by spreading a thin film of printers' ink on a plate of glass, then pressing the thumb or finger carefully on the plate to ink the capillary ridges, and afterwards printing the latter on a sheet of white paper. Typical forms can be discerned and traced, of which the individual forms are mere varieties. Wide departures from the typical forms are very rare.

Human Magnets.

The human frame is an excellent magnet. A man will carry a watch or years and be proud of its accuracy; then he will fall sick, the watch will be on the mantel or on the dresser, and will develop great inaccuracy and unreliability. No explanation is forthcoming except the one that the absence of magnetism upsets the time-keeper, and the best proof of this is that when the man gets around again and carries his watch it soon gets all right. No two men appear to have the same magnetism in their frames, and it is seldom that two individuals can use the same watch satisfactorily.

Wine Drinking at Dinners.

It is an undoubted fact that the serving of many and heavy wines at large dinners is gradually becoming a thing of the past, writes George W. Childs in the Ladies' Home Journal. Of course, I do not mean that wines are no longer served, for they are and will continue to be, so long as civilized men consider them a feature of dinners. But I do mean that of the varieties of wine there are fewer, and the quantities less, and of the quality lighter, than was the custom ten years ago. Were I preparing for a large dinner for men—which is always from the nature of things more heavily wine than an ordinary "mixed" dinner—I should not think it in the least degree necessary to order anything like the same amount or assortment of wines that would have been imperative a few years ago. And in extension of the statement that the qualities of the wines served are becoming lighter, the simple fact that at the average English dinner-table port wine has been almost entirely superseded by claret, may be cited. It is also becoming a very ordinary thing at English dinners to meet prominent men who do not drink wines of any kind, and in our country this is also becoming more and more a fact. Of course, a dinner must have fluids; the best of solids require some liquids with which to relish them, and a dinner would be but wasted energy and material without them. But I think it is no longer imperative to serve wines, or at least we can serve with them some other beverage which will be of equal pleasure to the constantly increasing set of people who find that dining and dining together is rather too heavy a combination for their comfort.

Where He Got the Information.

A friend of Sir Lubbock's who was traveling around the world sent him specimens of marine animals, which he studied carefully and of which he published a description. One of these was new to the naturalist, and, to his disappointment, his friend said nothing in his notes of its habit. He wished very much to add this information to his account. At last he thought that he had found the important statement, for the label on the bottle in which the animal had been preserved and sent home read, "S. J. W." "Evidently," thought Sir John Lubbock, "this means that the animal was captured in a spot half a degree west longitude and half a degree south latitude."

He published this conclusion, and rested content until his friend came home and demanded, "My dear fellow, what on earth made you say that I found that animal in the latitude and longitude you mentioned? I was never within 500 miles of the place." Sir John produced the bottle, and pointed to the label. "I took the information from this," he said. "What else can 'S. J. W.' mean?"

"Mean?" was the reply. "Why, it means that the animal is preserved in a mixture half spirits and half water!"

Gold.

Gold is so very tenacious that a piece of it drawn into wire one twentieth of an inch in diameter will sustain a weight of 500 pounds without breaking. Its malleability is so great that a single grain may be divided into 2,000,000 parts and a cubic inch into 9,523,809,513 parts, each of which may be distinctly seen with the naked eye. A grain and a half of gold may be beaten into leaves of one inch square, which if intersected by parallel lines drawn at right angles to each other, and distant only the one-hundredth part of an inch, will produce 25,000,000 little squares each of which may be distinctly seen without the aid of a glass. The surface of any given quantity of gold, according to the best authorities, may be extended by the hammer 310,814 times. The thickness of the metal thus extended appears to be no more than the 568,020th part of an inch. Eight ounces of this wonderful metal would gild a silver wire of sufficient length to extend entirely around the globe.

Costly Candor.

A story is told of a member of Congress, Mr. Taubee, which contains considerable humor. An old colored man called Uncle Eph had lived in the Taubee family many years, and was considered an honest and faithful servant. After his election to Congress, Mr. Taubee was taunted by some of his opponents with the statement that Uncle Eph had voted against him. Loath to believe it, he called old Eph into the room and said—"Uncle Eph, is it true that you voted against me at the election?" "Yes, Massa William," replied Eph; "I voted de 'Publiken ticket.'"

"Well," said Taubee, "I like frankness, and here's a dollar for your candor."

The old colored man stood scratching his head, when Taubee asked—"Well, Eph, what is it?" "Well, Massa Taubee," said Eph, "if you is buying candor you owe me fo' dollars mo', kase I voted agin yet five times."

WHEN some sad eyed women laugh, we are reminded of the noise made by trying to play a dance piece on a fiddle when half of the strings are broken.

TO FIGHT THE SMOKE.

Invention of an Apparatus for the Protection of Firemen.

This might be some sort of elephantine freak or a new style of diving apparatus, but it is neither. It is a safeguard for firemen, and was invented by W. F. Merryman, a veteran member of the Denver department.

Mr. Merryman has long been interested in the problem of providing some device which would enable a fireman to penetrate the densest smoke without danger of inhaling it. The invention which he has just perfected will, it is said, accomplish this result, and is based upon the discovery that a column of water four inches in diameter or less will, when suddenly reduced to about one-third that size at the nozzle, gather with it at that point large quantities of air. Two pipes lead from the air accumulator fastened on the end of the nozzle to the rubber mask, completely enveloping the face. Through the pipe nearest the end of the nozzle passes the fresh air gathered from the water, while from the other passes, by reason of a vacuum, the exhausted air from the lungs.

The apparatus is equally well adapted for use in mines in case of



THE AIR ACCUMULATOR.

fire-damp, or under any other circumstances where the atmosphere is so impure as to make work in it dangerous.

Neva's Delightful Climate.

In May, June and July the weather on the Neva is as hot as it is in summer time in Queensland, and the chief delights of the people whose official duties detain them in the capital is to be rowed about the Neva in the soft and mellow gloaming, and to experience the pleasurable sensation of being able to read the newspaper without the aid of artificial light at 11 p. m.

The Barbarous Esquimaux.

Both sexes among the Esquimaux are tattooed. Labrets are favorite ornaments. In early youth a cut is made in the lower lip and a small wooden ring is introduced to keep it from closing. Gradually it is enlarged and the adult is decorated with a labret of jade, ivory, bone or glass, shaped like a silk hat in miniature, the rim being inside the mouth to hold it.

Giants of the Forest.

In big trees the new state of Washington is quite rich. A Seattle paper mentions a fir in Sumas which is eight and one-half feet in diameter. Near Stanwood there is a cedar seventeen feet in diameter thirty-three feet from the roots, and twelve feet in diameter 112 feet from the roots. Nooksack reports a fir twelve feet in diameter.

Mail Matter.

A citizen of Chicago has invented a simple device for delivering mail matter to the upper floors of buildings by means of movable boxes attached to wires on the exterior. The effect is to save an endless amount of stair climbing—a matter which steadily assumes increased importance as buildings grow in height.

Standard of the Turks.

The sacred standard at Constantinople is believed to be formed of the nether garment of Mohammed, and a pair of his pyjamas, which are reverentially preserved at Lahore, are held by the faithful to have miraculously extinguished a fire at that place no longer ago than 1849.

Our Artificial Grinders.

The number of artificial teeth made in America is increasing very rapidly. Last year the trade turned out nearly forty million teeth. The houses which do the most extensive export trade are obliged to prepare teeth of different colors for different countries.

In Past Ages.

A copper rod projecting from the face of a cliff in Saline County, Mo., indicates that at some date in the far West, beyond the ken of man, copper mining was carried on in that vicinity.

A Rhode Island Quarry.

On a farm in the suburbs of Providence, R. I., there has been located what is claimed to be one of the largest and richest veins of granite in the entire country.

What a Beautiful Climate.

In the Sahara Desert the day may be boiling hot, but not infrequently the temperature at night falls below freezing point.

Statues and Fountains in Paris.

In twelve years the city of Paris has expended \$270,000 on statues and \$85,000 on ornamental fountains.

Lots of Ink.

It takes 1,000,000 pounds of ink every year to print Uncle Sam's paper money and revenue stamps.

THE MAN WHO QUIT.

His Departure Didn't Create a Ripple of Excitement.

About seven miles from the Arkansas River we met a man on the highway with a gun on his shoulder. He looked as if he had been having a terrible round go with break-bonefever, and that after he had been knocked out somebody had run his suit of clothes through a corn-sheller. He stopped and we stopped, and he asked:

"Goin' down as far as Clark's Bend?"

"Yes."

"Do me a favor?"

"Yes."

"Just after you cross Goose Creek you'll see a shacklety cabin on the left. That'll be an ole woman sittin' on a log dippin' or smokin' a pipe."

"Yes."

"And seven tow-headed and ragged young'uns rollin' around in the dirt."

"Yes."

"Waal, that's my place and fam'ly, or was up to an hour ago. I want ye to stop and tell the ole woman that I've quit. My name's Hiram, and if she doubts you, which she won't, you 'in describe me."

"Do you mean you have left home?"

"Sartin. I've got clean sickened out, and I'm headed for a healthier climate. Might jist stop and tell the ole woman, so she won't think I've mired or drowned."

"But didn't you tell her you were going?"

"No. I was out shootin' squirrels and made up my mind all of a sudden. It's right on your road and won't stop you more'n a minuit. Good-by."

We found the place without difficulty. There was the shacklety cabin, and there sat the old woman calmly smoking a clay pipe with a stem only two inches long. Scattered around among the stumps were half a dozen children, each one seemingly more dirty and ragged than the other. I was deputized to break the news to the woman.

"Howdy, stranger!" she saluted as I approached.

"Madam, have you got a husband named Hiram?" I asked.

"I reckon."

"Tall, sickly-looking man, with ragged clothes on?"

"That's hi."

"Well, we met him up the road about three miles, and he asked us to stop and tell you he'd quit."

"Dun left us?"

"Yes."

"Gwine off by hisself?"

"Yes."

"And he won't cum back no mo'?"

"That's the way I understood him."

She looked around at the half-cleared "patch" of ground grown to weeds—at the old cabin and the ragged children, and then she removed the pipe and blew a cloud of smoke into the air, and replied:

"Waal, hang me if I blame him one least bit! I've been wonderin' why he didn't go fur the last fifteen years!"

And as we drove away she sat there smoking and trotting her foot, evidently as calm and content as any woman in the State.—Free Press.

The War Was Over.

I was told a good story about Gen. Grant to-day that I never saw in print, says a writer in the Louisville Courier-Journal. It will be recalled that early in the war the New York Fire Zouaves were a crack regiment, commanded by Col. Ellsworth. Every man in the ranks had been a fireman and it was confidently believed that Ellsworth's command was able to put down the rebellion without assistance. The Colonel was a young man, handsome, gallant, burning with military ardor and thirsting for military fame. He was as much the idol of the North as Ashby was a few months later the idol of the South. The Fire Zouaves were the first troops to march into Alexandria, Va. Their Colonel was at their head and after the town had surrendered Ellsworth saw a rebel flag flying from a hotel.

Instead of ordering a squad to remove it he bolted into the house, ascended the stairway, went out on the roof and captured the flag; descending he was confronted by the landlord—one Jackson—who shot him dead. Jackson himself was then shot to death, and the affair created more sensation than considerable battles a few years later. After the war a daughter of Jackson secured an appointment in one of the Government departments. She was a modest, diligent and capable young woman, and discharged her official duties acceptably. In the course of time a superloyal gentleman was put in charge of the bureau in which she worked.

Nosing around, he soon discovered the antecedents of the young clerk and discharged her. She was friendless and penniless, and as a last resort went to the White House and called for Gen. Grant. He received her and she related her story to the silent man. Without saying a word he took a piece of paper and wrote: "The war against men is ended and my administration shall not begin one against women. Restore Miss Jackson to her clerkship instantly." This was addressed to the loyal bureau official and the young lady is yet in the public service. That was an exhibition of chivalry that Durilo or Francis I. might have envied.

Far Western Gallantry.

Miss Lizzie Green met with a serious accident one Sunday afternoon while out sleigh-riding. The sleigh overturned and the lady was thrown to the ground with great violence and there is a contusion on her alabaster brow as long as a clothes line. Miss Green has our sympathy in her misfortune and accident, and if it would do any good we would butt the Rocky Mountain range of mountains out of existence.—Montana Picket.