

TO CORRESPONDENTS.
All communications for this paper should be accompanied by the name of the author, not necessarily for publication, but as an evidence of good faith on the part of the writer. Write only on one side of the paper. Be particularly careful, in giving names and dates, to have the letters and figures plain and distinct.

OUR JUVENILES.

Dick and the New Baby.
Aunt Lucy's got a brand new baby—
The queerest little mite;
He makes one think of lobster salad—
He'd look much better white.
He hasn't got a single tooth,
Or worth mentioning a nose;
His head's as smooth as a rubber ball—
He's nothing much but clothes.
He cannot talk or run about,
He don't know how to play;
He'll yell until his face is black
A dozen times a day.
I'd rather have my sister pup
Than aunt's precious dear,
And so I think would Uncle Dan;
But women are so queer.

Johnny's Acrobats.

"Come, Johnny, it's bedtime," said mamma.
But Johnny was making a wonderful figure, wherein one acrobat, standing on his head, was "taking hold of heels" with two of his brethren above, while a fourth appeared to be dancing on their heads. The faces of the performers expressed such unqualified enjoyment of the fun and the figure was really so funny that Johnny laughed loud and long.
"Look! mamma."
"Yes; I see; but it's bedtime."
"I made this without looking at the papers at all."
"Don't make another one to-night, Johnny."

Johnny took down the box with a sigh, then proceeded to pull his jolly acrobats to pieces, a process over which they laughed silently. The bodies were laid carefully in the box, the heads placed beside them in a row, and lastly the vacant spaces filled up with the dismembered arms and legs; and still the faces smiled on.
"Wouldn't it be funny if we could take off our arms and legs so?" said Johnny, as he closed the box.
"Very funny."
"You might see me sometimes with Jimmie Nelson's head on."
"I'd rather see your own," replied his mother, with a kiss. "Aren't you almost ready?"
Johnny could find no possible excuse for delaying, so he trotted slowly upstairs with his mother. He had so much to talk about that it seemed a long time before he was fairly arrayed in his little white "nightie," and after that it took him some time to say his prayers.
"I must put Cousin Annie in," said he, earnestly; "because she gave me my acrobats."

Johnny thought he never should go to sleep that night; and just as he was entering the Land of Nod he heard the strangest little noise, like the pattering of tiny feet around him. He sat up very straight and rubbed his eyes incredulously, for, wonders of wonders! there were his four jolly acrobats turning somersaults, dancing jigs, and cutting up all sorts of capers upon the bed-quilt.
"He's awake," said one of them, at length. Then they all stopped dancing, and the one which Johnny had always called the clown straightened himself up and prepared to make a speech.
"Master Johnny Wheeler," said he, in a squeaky little tone, "we've always done our best to amuse you haven't we?"
"Yes," replied the wondering Johnny.
"And it's only fair that we should have some amusement in our turn?"
"So it is," replied Johnny.
"Well, then, what can you do for us?" Johnny's mind ran hastily up and down the scale of his accomplishments.
"I can speak a piece for you."
"Let's hear it."
He stood up on the bed (no easy matter, by the way), and commenced:

"Pretty Polly Pansy
Hadt'n any hair;
Just a ruff of gold down,
Fit for ducks to wear.
Merry—"

"I don't think we want any more of that," said the clown, with a wave of his arm. "Give me something more sensible!"
Johnny thought for a moment, and then began again:
"Hi! the baby is getting up-stairs,
One step, two steps, three steps slow,
Down she comes with a thump, thump, thump."
Good enough for her," shouted the clown.
"Capital! ha! ha! ha!" exclaims the others in concert.
"Mamma kisses—"

"Oh! we don't want to hear anything about kisses! Just leave that where it is."
"I don't like you a bit," thought Johnny. "I only know one more piece, and I am glad of it."
"Creep away, my bairnie,
Creep before you gang,
Listen—"

"I should think so," put in the clown, frowningly.
"Creep!" cried the others, in scornful chorus. "That won't do at all."
"That's all I know," said Johnny, crossly, curling himself up in the bed clothes again.
"Couldn't you stand on one foot upon that headboard while?" asked the clown, glancing at the bedstead.

"No, I couldn't."
"Or jump up to the top of that looking glass?"
"No, I wouldn't."
"Or sit astride the gas fixtures for half an hour?"
"No."
"Brothers," said the clown, majestically, "he doesn't know anything. He must be taught."
"Yes," shouted the others, "he really must be taught."

Here one of the jolliest of the group seated himself upon Johnny's breast and waved a flag over him a moment.
Johnny began to feel the queerest sensations in his back and limbs. His fingers and toes were gone, and instead of them were three or four funny little grooves. He knew well enough what these grooves were for. He liked them very much indeed—upon the acrobats, but to find them upon himself was a very different matter.
"Suppose I should grow into one of them," he said, thoughtfully.

"Come!" said the clown, "you're all ready. Get up!"
"I shan't do it."
"You'd better."
"I shan't."
"It's a clear case of disobedience," thundered the clown. "What shall we do?"
"He must be punished."
"So he must. Brothers, I have a headache, caused by a tremendous whack which he gave me this very evening. I demand a fair exchange."

While Johnny was wondering what a "fair exchange" was, the clown came toward him with a series of jumps, pulled his head quickly from his shoulders, and thrust his own in its place.
"You let my head alone?" screamed Johnny.
But he found himself staring at his own face, which looked at him from the clown's painted shoulders, and which seemed to take on a leering, mocking expression as he looked.
"Anybody else want to change?"
"Yes; my arm's broken."
"O—h!" exclaimed Johnny. "I don't believe it."
"My legs are both black and blue."
"It's the paint," cried Johnny, waving his arms and trying to kick with his little wooden legs.

But the acrobats had them off in a trice, and in the twinkling of an eye the exchange was made.
"Hardly any of this is me," thought Johnny, ruefully. "Wonder if I shall ever get myself back again. This head does ache a little, truly."
But he couldn't stop to think about it, for just then the clown announced in a loud voice that an entertainment would commence in five minutes, and the three others busied themselves in arranging their poles for the performance.
And what wonderful things they did! Balancing themselves upon each other's shoulders, jumping from bed to bureau and back again, turning somersaults from soap dish to water pitcher, waving a tooth-brush instead of a flag—in short, indulging in more extravagant feats than the little boy had ever dreamed of before.
"Now," shouted the clown, "we'll have our song. We'll give you something worth hearing." And, without stopping their evolutions for an instant, the queer little figures piped up:

"Jolly acrobats are we,
As you see,
Mounting high or stepping low,
Here we go,
Without hands and without feet,
Our gymnastics who can best?
O—h!
Jolly acrobats are we,
Doing wonders, as you see."
There were a great many verses, but they all sounded just alike. Johnny became tired of it at last, and was thinking that he might just as well go to sleep, when the clown cried out, "Silence."
Instantly the three acrobats jumped upon their poles and stood there.

"Do you want your head back again?" inquired the clown gravely of Johnny.
"Of course I do."
"And your arms and legs?"
"Yes."
Very well, earn them then. I'll give you five minutes to climb to the top of that frame (pointing to a photograph which hung just over the headboard). Only five minutes! Come now.
"That's my father's picture," said poor Johnny.
"Can't help it if it's your grandfather. There's one minute gone."
"I'm so heavy."
"Two minutes gone."
Johnny rose slowly on his wooden legs, and commenced the ascent. His limbs were grooved, to be sure; but the bedstead was so very smooth that he slipped back again.
"Oh! dear me. I—"
"Three minutes gone."
He tried again, but with the same result.
"Tisn't fair; these arms and legs aren't good for anything. You said they wasn't."
"Four minutes gone."
Johnny tried again; but it was such very hard work that he began to cry. All at once he heard a voice, which did not belong to the clown.

"What's the matter, darling?" And the little fellow looked into his mother's astonished eyes.
"I wanted my head—and my—arms and legs."

"They seem to be all here," said mamma, laughing. "What were you trying to do, Johnny?"
"Trying to—trying to—Oh! mother!" And he clasped her tightly round the neck. "Praps I've been asleep. But are you sure my acrobats haven't been out of the box?"
"I certainly think I should have seen them if they had," replied mamma.
She laughed again, and Johnny couldn't help laughing a little too, he was glad to be himself again.
"It's ever so much better to have your arms and legs fastened on," he exclaimed at length, with a sigh of relief.
"I should think so."
"I wouldn't change heads with anybody! Would you, mother?"
"That would depend upon circumstances," replied mamma.
"I don't believe I shall ever like that old clown so very much again," murmured Johnny, sleepily.
But he did.—Mary C. Bartlett.

COOLING OFF A MEETING.
The street-preacher, feeling his mission superior to that of other men, doesn't always recollect that the golden rule should form part of his creed when he selects a place for his wild oratory. But there's a street-preacher in San Francisco who will probably be more discreet in future in this respect. He established himself at a corner of Third and Market streets in that city, and soon the cracked tones of his appealing voice summoned sinners to a hearing. The sinners came in crowds, not so much for profit as amusement, and they blocked up the sidewalk, and impeded business. The annoyed proprietor of the store in front of which the lowly evangelist was holding forth, entreated him to move on, but the lowly evangelist wouldn't move. What were the affairs of this world to those of eternity? He cared not for scoffings and deridings; he would obstruct the thoroughfare if he chose, and laugh at the threatened martyrdom. Then the martyrdom came. The merchant, tired of appeal, bethought him of another remedy. He got out his hose, affixed it to the plug, and turned a brass, threatening nozzle upon the crowd. Still the preacher preached. Then the torrent was let on, and the audience of that preacher scattered before the first venefol squirt. In vain the shepherd sought by renewed shouting to gather his sheep. The hose was levelled at him and a cataract roared upon his abdomen. Then he too took to the heels of the flesh and left spiritual matters to take care of themselves. It was a fervent occasion, but the course of the indignant merchant seemed to have thrown what the old darkey termed "a coolness over de preacher's." Public opinion was with the merchant. A street-preacher may be in earnest, but he has no more right than a banana peddler to obstruct a thoroughfare.

SOME NEW WONDERS.
Clever things in industry and invention are at times put on record. Thus, cockchafers are now made use of to artists, for a Frenchman has found that the insects, after feeding, yield a few drops of a liquid which answers the purpose of Indian ink. Different tints can be obtained by feeding with different kinds of leaves. Near Konigsberg there are turfbogs of large extent; a clever experimentalist converts the turf into mill-board and paper. The paper is said to resemble straw-paper in brittleness. Clever manufacturers make and sell meat-flour, and recommend it as nutritious. This flour is made from the beef used in the manufacture of "Liebig's Extract;" all the juices, all the goodness are squeezed out, and then the worthless beef is ground up for sale. The buyers are, of course, cheated, for the meat-flour thus produced contains no nutriment. It would be better to eat sawdust. A Belgian boils beef bones in water for some hours, with addition of rock-salt and a little alum, and thereby obtains a size which can be used with advantage in the preparation of cotton and silk goods. Two Frenchmen have proved that sawdust and wheat-bran and old rotten oak wood will each yield a gray dye—one yellowish, the other bluish; and others announce that skins can be tanned by soaking them twenty-four hours in a solution of chloride of zinc; and that the very best gelatine for photographic purposes is that prepared with addition of a small quantity of chloride of zinc.

WHIMSICAL CIRCUMSTANCE.—The following whimsical circumstance and peculiar coincidence, it is said, actually took place some time since. A boat ascending the Ohio river was hailed by another boat, when the following conversation ensued: "What boat is that?" "The Cherry-stone." "Whence came you?" "From Redstone." "Where are you bound to?" "Limestone." "Who is your captain?" "Thomas Stone." "What are you loaded with?" "Millstones." "You are a very hard set altogether; take care you don't go to the bottom. Farewell."

A farmer near Fairbault, Minn., has cut from six acres about 27,500 hoop poles. The price has ranged from 80 cents to \$1.40 per hundred. At the lowest price they pay better than wheat. But you can't cut 'em with a reaper.

THE WORLD OF SCIENCE.

MEDICINE.
FOOD MEDICINE.
Dr. Hall relates the case of a man who was cured of his biliousness by going without his supper and drinking freely of lemonade. Every morning, says the doctor, this patient arose with a wonderful sense of rest and refreshment, and a feeling as though the blood had been literally washed, cleansed and cooled by the lemonade and the fast. His theory is that food will be used as a remedy for many diseases successfully. As an example he cures cases of spitting blood by the use of salt; epilepsy and yellow fever, by watermelons; kidney affections, by celery; poison, olive or sweet oil; erysipelas, pounded cranberries applied to the parts affected; hydrophobia, onions, etc. So the way to keep in good health is really to know what to eat—not to know what medicines to take.

REMOVAL OF A TAPE-WORM.
A writer in the *Druggists' Circular* says that in treating some cases of tape-worm he has employed no preliminary provisions beyond forbidding the patient to take any breakfast the day on which it is intended to remove the worm, and giving him a large dose of Rochelle salts the preceding night. At 10 o'clock in the morning a dose is given made of one-half ounce of bark of pomegranate root, one-half drachm pumpkin seed, one drachm ethereal extract of male fern, one-half drachm powdered ergot, two drachms powdered gum arabic, and two drops croton oil. The pomegranate bark and pumpkin seed are thoroughly bruised, and, with the ergot, boiled in eight ounces of water for fifteen minutes, then strained through a coarse cloth. The croton oil is first rubbed up with the acacia and extract of male fern, and then formed into an emulsion with the decoction. In each case, the worm was expelled alive and entire within two hours. In each case, too, the worm was passed with the head firmly fastened to the side of its body at about the widest part, from which it was with difficulty removed.

PHYSICS AND CHEMISTRY.
DOES SUNSHINE PUT OUT FIRES?
A good deal of discussion has lately taken place in this country over the old question whether sunshine checks combustion. It is an old notion that sunshine lessens the intensity of a fire, and may even put it out, and the theory was that the sun's heat by expanding the air caused a diminished supply of oxygen to the coal. This and all other explanations are now condemned, and the fact is denied. One writer says that if a few pieces of charcoal are ignited in a chaffeur, and placed in a sunny room provided with closely-fitting shutters, the fire will appear to die away in the sun's light. But if the shutters are closed, the coals will be seen to be in full combustion. There is no phenomenon at all, but only the appearance of one, which is due not to the sun's heat, but to the fact that its light, being stronger than that of the coals, overcomes and subdues it. The fact of combustion is so intimately connected with glowing ignition in our minds, that anything which lessens the glow appears also to diminish the combustion.—*Cassell's Magazine.*

REPRODUCTION OF BURNED RECORDS.
M. Rathelot, an officer of the Paris law courts, has succeeded, in an ingenious manner, in transcribing a number of the registers which were burnt during the Commune. These registers had remained so long in the fire that each of them seemed to have become an homogeneous block, more like a slab of charcoal than anything else, and when an attempt was made to detach a leaf, it fell away into powder. Many scientific men had examined these unpromising black blocks when M. Rathelot hit upon the following method of operation: In the first place, he cut off the back of the book so as to leave nothing but a mass of leaves which the fire had caused to adhere to each other. He then steeped the book in water, and afterward exposed it all wet as it was to the heat at the mouth of a calorifere. The water, as it evaporated, raised the leaves one by one, and they separated, but with extraordinary precautions. Each sheet was then deciphered, and the copy certified by a legal officer. In this way the records of nearly 70,000 official acts have been saved. The appearance of the pages were very curious; the writing appeared of a dull black, while the paper was of a lustrous black, something like velvet decorations on a black satin ground, so that the entries were not difficult to read.

ORNITHOLOGY.
HISTORY OF THE DOMESTIC FOWL.
Among the conclusions, in a contribution to the history of the domestic fowl by Jettelles, it is stated, that some species of the genus *Gallus* existed in Europe in the Tertiary period, although none are found wild there at present; and also, that two varieties of a species very near to, if not identical with the *Bankiva* or domestic fowl, existed in Western Europe in the older Post-tertiary, contemporaneously with the man of that period.

BIRDS ON THEIR TRAVELS.
A correspondent of *Nature* relates a curious phase of bird life. While he was

crossing the Atlantic last September, and 900 miles from the nearest point of Newfoundland, two land birds settled on the ship, and after a short rest resumed their passage to the southeast. They seemed to be a species of lark. The question was, where did they come from, whither were they going over that vast space of ocean with no resting place nearer than the Azores, how were they fed, and what guided them? The writer is not of opinion that land birds are often driven out to sea by the force of the wind. Some other cause must influence their movements. Birds must possess strong affections, as they are always seen in pairs on these long journeys.

ENTOMOLOGY.
HOW THE SPIDER BUILDS.
Having first decided upon the general location of her net, the spider takes position, head downward, upon the leeward side of a small twig or branch, or upon its top, and then, turning her abdomen outward, expresses from her spinners a drop of gum, which instantly dries so as to form a fine end of a silken thread. This is taken by the wind (and careful experiments have proved that a current of air is absolutely necessary to the extension of the line) and wafted outward, waving from side to side, and usually tending upward from its extreme lightness until at last it touches some other branch at a greater or less distance from the first. When this stoppage is perceived by the spider, she turns about and pulls in the slack line, until she is sure that the other end is fast. If it yields, she tries again and again, until successful. If it holds, she attaches her end firmly by pressing her spinners upon the wood, so as to include the line. The first and most important step in the construction of all geometrical nets has now been taken, and the spider can meet with no serious difficulty in completing her task.—*Prof. Wilder, in Popular Science Monthly for April.*

METEOROLOGY.
SUDDEN FALLS OF TEMPERATURE.
Prof. Loomis, after careful investigation, concludes that these low temperatures, which occur at irregular intervals in every month, are owing to the descent of cold air from the higher atmospheric regions, instead of a current of cold air from the north, the usual mode of accounting for them.

FORECASTING THE WEATHER.
On the eleventh of January last a telegram was sent from Boston to France, announcing that on the previous day a great cyclone, with its center at that time in Newfoundland, was moving thence eastward across the Atlantic, and in four or five days would probably arrive in Europe, by way of Ireland. The storm did, in fact, reach Ireland on the fifteenth of January, and proceeded eastward. This verification of weather forecast is mentioned by M. H. Tarry, in a communication to the French Academy of Sciences on the possibility of predicting the arrival of transatlantic storms in Europe.

HISTORY AND GEOGRAPHY.
THE GREAT OASIS OF WESTERN EGYPT.
The *Cologne Gazette* announces that the expedition of the Grand Duke of Oldenburg to the Great Oasis of Western Egypt has been successful. He was accompanied by Prof. Brugsch-Bey, Dr. Lütge, of Berlin, and several officers who had served in the late Franco-German war. After four-and-a-half days' march over the Libyan Desert, the expedition reached the main station, El Khargeh, where Dr. Brugsch made a careful examination of the ruins belonging to the times of the Pharaohs and to the later periods of the Roman occupation; and as he is the first Egyptologist who has visited these interesting sites of Nubian and Roman supremacy, the results of his investigations cannot fail to throw new light on the question of the ancient history of the country. Dr. Brugsch was fortunate enough to collect a large number of inscriptions, and he has also, he believes, been able to prove beyond question that the great Temple of Hibe belongs to the age Darius I. of Persia, while the smaller Temple of Nardah is to be referred to the time of Antoninus. It is understood that the results of his highly interesting African expedition will be published in the form of a special work on the return of the Grand Duke to Germany.

THE MARCH OF EMPIRE.
Mr. Daniel M. Tredwell, in a paper on "Evidences of the Prehistoric Migration from America to Polynesia and Eastern Asia," read a few days ago before the Long Island Historical Society, showed that in very early times a vast population was concentrated upon the Pacific coast of America; that, while ignorant of the art of navigation, they grew up to great and powerful nations, and, finally bursting the barrier which the ocean had imposed, they spread themselves over Eastern Asia, Polynesia, India, Persia, Egypt and Greece. Thus the march of empire is shown to have followed the sun from the earliest times, and emigration to have in comparatively modern times but completed a circle which may have been described before over and over again.

AGRICULTURE.
DIVERSIFIED INDUSTRY.
The advantages of a diversified industry in agriculture are illustrated by facts

which may be interesting to our farmers. It is stated that at an agricultural meeting at Valenciennes, France, a triumphal arch was erected, bearing the following inscription: "The growth of wheat in this district before the production of beet-sugar was only 976,000 bushels. The number of oxen was 700. Since the introduction of the sugar manufacture the growth of wheat has been 1,168,000 bushels and the number of oxen 11,000."

CULTIVATING THE BAMBOO.
In China the bamboo is extensively cultivated. There are no less than sixty different species of it, and it is used for almost everything. Out of it are made baskets, beds, chairs, mats, pipes, brooms, thatches, umbrella ribs, and ever so many kind of household and agricultural implements.

ANTHROPOLOGY.
NEW RACES IN AFRICA.
Dr. Gerhard Rohlfs, the African explorer, recently delivered a lecture at Cologne on the last part of his journey from Tripoli to the coast of Guinea, which is of particular scientific interest. He treated in detail the state of civilization of the empire of Bornu (situated near Lake Tsad and its capital, Kuka), and it appears that the negro tribes that inhabit those parts are highly civilized, in fact much more so than most other tribes in Northern Africa. From Kuka Dr. Rohlfs went to Mandara, which is situated south of Bornu, and then entered the districts of the Fullo (or Fullo) tribes; he found the inhabitants to be of light yellow, almost white complexion, and surpassing even Europeans with regard to beauty of form and growth. Dr. Rohlfs then descended the Tshadda river down to where this joins the Niger, and was hospitably received by the English colonists at Lokoja; from here he visited a negro country in a western direction, then passed the Kong mountains, and successfully traced his way through the thick tropical forests to the coast, which he reached near Lagos.

ASTRONOMY.
THE TRANSIT OF VENUS.
An interesting note of the observations of the transit of Venus in the Himalaya mountains by J. H. N. Hennessey is communicated to *Nature*. In describing the phenomena of the transit, the author has occasion to speak of Venus as she appeared across the sun's limb, when one portion of her own limb is seen against the sun, and the other remains against the sky. The former portion he calls Venus's sun limb or Vn, the latter Venus's sky limb, or Vsk. Again he requires to mention a ring of light around Vn, which he indicates by Lk, the corresponding ring around Vn being understood by Ln. Another point is this: Any one who has watched, say, the sun's limb, especially at a low altitude and with high power, must be aware of the turmoil or ebullition which there appears, very like as if the limb was being boiled. He denotes this kind of turmoil by "boiling." The author did not detect Venus's limb until after it had made an indentation on the sun's limb. The latter boiled sensibly, but by no means violently. It appeared jagged, and as if with minute spikes projecting inwards, all of which were well defined in the bluish field. Watching Vn, he found it also boiling slightly, but in a manner somewhat different to the sun's limb. The appearance was that of boiling vapor coming round from the face of Venus, turned toward the sun and overlapping Vn; moreover, this boiling was not restricted to the edge of Vn, but extended two or three minutes beyond, thus forming a kind of boiling annulus, in which there were minute sparkling specks dancing and shifting about, appearing and disappearing; the edge Vn was seen through the boiling. Neither pear-drop nor ligament was seen either at ingress or egress.

OCCASIONALLY there is a discovery made at Pompeii that throws a world of light on the domestic habits of the people of that town, and teaches us that, with all our boasted modern civilization, we are far behind them in some of the very essentials of true domestic happiness. For instance, what a longing fills the breast for a return of those good old days, when we read of the recent discovery of a woman in the act of building a fire in the kitchen stove, and her husband in an adjoining room sleeping the sleep of the just.

CLIMATE AND MORALS.
Milton Briggs, in an essay on "Western Farming," in the *Iowa Fine Stock Gazette*, takes the position that "in mountainous countries where, in the absence of malaria or sporadic life, the atmosphere is pure and salubrious, with the proper food, man attains to the greatest vigor and highest intellect." For this reason he contends the highlands of New England and mountains of Pennsylvania furnish our leading statesmen and leaders in civil life. On the other hand Mr. B. finds that the low lands bordering on rivers, especially in warm climates, especially where malarious diseases are prevalent, are sure to give character to the people of such localities, as well as the domestic animals. He contends that in such localities vice and crime, as well as the lower order of intelligence, are sure to prevail as a marked feature of the inhabitants.