

## YOUNG FOLKS.

Nino.

He lived in a great, rough shed which the railroad contractor had erected to house his horde of Italian laborers in. Old Antonio had always owned and controlled him, but if he was the boy's father he had very little of a father's feeling, for he scolded and abused the boy whenever his humor happened to set in that way.

There were seven days in the week to Nino, and these seven were all alike except that on one of them the men worked less and ate and smoked and drank beer and washed their clothing. Old Antonio did not drink beer because it cost money, and every cent of his wages not necessary to buy bread he was saving up to take him home and purchase a vineyard on which to end his days in easy indolence; for he could easily get a wife, and she could do all the work the vineyard required.

So, on Sunday, old Antonio washed his and Nino's clothes, and slept. If there had been a priest near he would have gone to mass in the morning, and washed and gathered sticks for cooking just the same the rest of the day; but perhaps that would have given him less time to beat Nino on that day, which was the hardest the poor boy had to pass.

In his own sunny Italy Nino remembered having been page to a kind English lady who had wintered in his native town, and she had taught him about a different way of spending Sunday, and of pleasing God, but his father and mother had both died on the passage over, and old Antonio had claimed to be his uncle and told the boy he would kill him if he did not say so, too.

Then for a while they had traveled together from town to town with an organ and banjo, until old Antonio had done something for which the officers wanted him, and he had suddenly gone West and joined the gang of railroad builders, among whom he was known only as "Number 27."

Every day there was sent down from the town on the train a sack of bread to feed the hands. Often little Nino was sent to wheel it up from the station. Sometimes the sack was old and rotten, and great holes gaped in it. Then the trainmen didn't handle it very carefully. They would laugh and joke about the "dago's fodder," as they flung it from the train. Once the bag burst open, and several of the loaves rolled out on the platform. When Nino told Antonio about this a greedy look came into the old fellow's eye, and he looked straight at Nino and said:

"Why nota keepa one?"

Nino shook his head to show that he thought such a thing would be wrong.

This seemed only to make Antonio angry, and he shook his fist and said: "Next time bring one."

Next day when Nino started for the bread, old Antonio who had just finished his dinner, brought a large blouse and put it over the boy's shoulders, and, buttoning it tight at the bottom, said: "Ona here; ona there," tapping the loose folds of the blouse on either side.

The boy looked down to the ground with a deep blush of shame, but said not a word.

"You hear?" demanded old Antonio.

Nino looked up and making a gesture of disapproval with his hands, shook his head.

Antonio was shrewd enough to see that to threaten would not be policy, and so he changed his tone to a wheedling one. He thrust his hand into his pocket and drew out some small coins—the price of a loaf of bread—and showing them to Nino, said: "So much, so much, Nino, to take old Antonio and good Nino back to sunny Italy; so we go quick, good Nino," said Antonio, "so Nino see friends."

"You said I had no friends," spoke up the boy quickly; "you told me that you were my uncle, and that all the rest were dead with father and mother," and the boy's brave sentence broke down almost with a sob.

Old Antonio's face glowed with passion and wickedness, and he stamped his foot and almost shrieked in the boy's face, as he hurried off to his work at the call of the boss: "I kill you, you no do so I tell!"

The men all ate their meals together, and while Antonio kept silence, there was an ominous look in his eye. After all the men had lounged away to smoke or lie down, Antonio called Nino into a corner. The boy trembled, but obeyed. Antonio muttering and growling began to unloose his belt. Nino backed away from him into a corner, with a pleading look and gesture. He stumbled over something which rolled from under his feet and stopped with a thud against a post. When Antonio had taken off his belt he next whipped out an ugly looking knife which he held in his left hand. "Now, I make you pay," he hissed; "if you scream, I killa you," brandishing his knife.

The boy begged him in the name of the Virgin Mary, the holy saints, and his father and mother, but the infuriated demon gnashed his teeth in rage, and put all his strength into his blow, the force of which tossed his hat from his head and threw a shower of glowing coals from his pipe. It cut the boy down like the stroke of a cimeter. He gave one involuntary, agonized shriek, and fell in a helpless heap. The instant the sound died away from his lips there was a murderous gleam of steel above his head that would have been his death-warrant, for murders are of common occurrence in these Italian dens, and not always punished; but just then another flash arrested his arm. It began at his feet, and whirled in a circuit round and round, accompanied by a sizzling noise that could not be mistaken by one who had ever heard it.

The murderous wretch paused and stared; then his hand dropped nerveless at his side. The coals from his pipe had caught in some fuse stored in that corner of the shanty, and the coils had been dragged by the feet of the boy and lay across a train of black looking substance that trailed along to the post where lay the thing over which the boy had stumbled—a can of giant powder used for blasting. The can had been carelessly left open, or else had been broken by the force of its contact with the ground, and spilled its contents as it rolled along.

The Italian stood and stared at the spectacle as a charmed bird at a snake. Even the footsteps and outcries of some of his comrades, who had been attracted by the shriek of the boy, failed to divert his gaze from the impending destruction.

Some of the new arrivals took in the danger at once, and threw up their hands in alarm. They called to Antonio to run for his life. They tried to each other to stamp out the fuse. But nothing was done, and

the hissing, flashing circle of flame burned on its fatal course toward the powder.

They saw the inevitable fate of old Antonio, but their danger was great and true to the brutal instincts of greed and self-preservation; most of them ran hastily up stairs to secure their money and effects. Those who were left were like Antonio, rooted to the spot with brute fear. In another instant all would have been blown to atoms, but an unlooked-for thing happened. The boy, whose presence had been forgotten and who had been in a swoon, had been awakened by the tumult and the smell of burning sulphur. He looked about him. Just behind him was an open door. In a second he could have sprung through it and dashed away. Before him was the blazing powder leaping on toward the can. The boy was sensible enough in a minute to see all this. He saw that he could choose his course. He could flee and leave his persecutor to his fate and go out and find new friends for himself who would help him to make his way back to his own country; or he could stay to risk an uncertain fight with the danger before him and perhaps die with those who would have taken his life; or, if he saved them, it would be only to renew his hateful slavery.

All this flashed through his mind in a second, and more. That something more must have been memories of the long-ago and almost forgotten lessons about the lowly one of Nazareth and his treatment of his enemies. Anyway, the path that the boy chose was the same one of daring self-denial. In an instant, while they were pointing to him the door behind and bidding him to escape through it, he had gone to work with hands and mouth, seizing the blazing red-hot fuse and applying it to his moist lips and tongue in spite of the pain, until the last spark was extinguished and the panic-stricken crowd, reassured, and then he sank into another swoon from overdoing while yet weak from the effects of the fright. But this time he fell into tender, protecting arms—the engineers, timekeepers and contractor, who had heard the whole story from one of the men who chanced to be near enough to hear all.

Old Antonio would have met his deserts, but he took advantage of the excitement about the boy and hastened away.

The boy was nursed and tenderly cared for, and a full account of the affair got into the daily papers of a neighboring city, in which names were given in full.

Next day the company was surprised by the arrival of a well-dressed pair of Italians who kept a fruit and confectionery establishment in the city. They had seen the name of the young hero, as the papers called Nino, and had recognized it as the name of their nephew whom they had supposed died with the father and mother, and from whose loving care old Antonio had been defrauding them all these years. When you go to the city you will notice behind the counter of one of the most fashionable caterers, a youth handsome in spite of an ugly scar across his brow, and a slight deformity of his lips. These are the mementoes of his escape from the slavery of old Antonio.

## RUINED BY DRUGS.

A Horrible Example of the Effects of Morphine and Cocaine.

A man with more than 1,000 scars on his body lies on a cot at the Chicago Hospital. He is a victim of the use of morphine, cocaine, and other powerful drugs. His story is an interesting one, and, as Dr. McNamara says, he "is an excellent subject for a novelist." When an attendant removed the clothing of the patient yesterday the skin of his emaciated form looked like that of a tattooed man. He was black and blue from neck to ankles, the result of five years' use of a hypodermic syringe.

The man's name is George Moynaux, or Moynard, a French physician of 35, learned in his profession, speaking four languages, and a graduate of the University of Heidelberg, Germany. He was picked up Sunday night at Halsted and Jackson streets. His clothing was old and torn, and he looked like a tramp. He had taken a dose of atropia, one of the deadliest of poisons, and in one of his pockets were found two vials, one containing enough atropia to kill fifty men, and about fifteen grams of cocaine in the other. At the hospital Moynaux at first refused to give his name, but after some persuasion Dr. McNamara secured it and a portion of the unfortunate's history.

After graduating at Heidelberg, Moynaux went to Paris, where he built up a lucrative practice. Several years after establishing himself in the French capital Moynaux began to experiment with the use of morphine and cocaine. He chose himself to practice upon. He took the drugs in moderate injections, and one day he thought he had made a grand discovery. He found he could take cocaine with impunity and counteract its effects by taking atropia. This theory has long ago been exploded by medical men, except that atropia taken with morphine or cocaine will kill the effects of either of the drugs and leave the patient in the condition he was before he took the poison. However, Moynaux's experiments ended disastrously, and he fell a victim to cocaine and morphine. Shortly before he fell into the street Saturday night he had injected ten grains of cocaine into his body, and, still believing in his old theory, had taken a dose of atropia. He evidently took too much, as it rendered him unconscious. This was the sad end of his former splendid career in Paris, where he lost his practice and came to America. Here he sunk lower and lower, every cent he could procure going toward the purchase of the only poison that could give him temporary bliss.

Moynaux suffered untold agony yesterday. He was given an injection of two grains of morphine, but this was not one-twentieth the amount sufficient for him, and he begged and pleaded in four different languages to be given the injector and a bottle of cocaine. The man writhed and twisted about in a frightful manner, and stared like a wild man at those about him. Finally Dr. McNamara had to take extreme measures and strap the unfortunate to the bed. "He will die," said the Doctor, "and there is no help for him, he is so far gone. I never before saw such a desperate case."

A little girl was out in a flower-garden and espied a pansy with a short stem. She plucked it gleefully, and running into the house gave expression to the pretty poetical conceit: "Mamma, I found it sitting down; it aint dot no legs."

I think about the only difference between people in this world is that some know what they want, and some don't.

## ELECTRICAL.

A writer on the subject of causing death by electricity says there are reasons for believing that death by this means is so swift that the application of the current could be repeated a number of times within the interval that is known to elapse between the receipt of an injury and the cognizance of it by the brain. In proof of this he cites the results of a series of experiments conducted by Prof. Mynbridge, at which he was present.

The lantern was used to make a series of instantaneous photographs, and in order to make the intervals between the exposures, as well as the times of exposure exceedingly short, the plates were exposed and stopped by means of an electric current. One very interesting series of pictures made was intended to illustrate the slowness of the brain in receiving impressions. Two women were employed; one stood in a bath tub and the other sat on a raised chair and poured a bucket of water over the standing woman's head and shoulders. In order to make the shock more intense, Prof. Mynbridge had filled the bucket with ice-water, unknown to the victim, who would not have awaited the douche so patiently had she known what its temperature was going to be. One view showed the water tipped over and falling, yet not quite touching the girl's head. The next view showed the water splashing from her head and shoulders, and yet there was no sign of sensation. In the third picture she was just beginning to respond to the shock, and the subsequent pictures illustrated the further phases of the response. The point of special interest, however, is in connection with the second view. The electric current had in that case first exposed the plate, and then after a very short interval had shut it off again; that is to say, had acted twice within an interval of time between two the sufficiently long for the sensitive plate to take an impression of the view and this after the ice-water had touched the woman's shoulders, and before she was conscious of it.

Mr. E. J. Hall, Jr., in drawing attention to the fact that the jarring of the waves materially increases the difficulty of submarine phoning, speaks very hopefully of the future of the telephone service. He considers that so much success has already been attained in submarine work over a line of ten miles that the accomplishment of any given distance is only a matter of study and application. Mr. Hall says: "No man can tell what a day may bring forth in the way of telephonic improvements. Ten years ago every telephone man declared, and honestly, that the wires could not be operated in a submarine conduit; to-day ingenuity has contrived means to do this, and in large cities the companies prefer conduits in some places." The extension of what may be called the aesthetic uses of the telephone is also referred to. Not only are screams regularly transmitted to the houses of persons who are unable to attend the services, but a trumpet arrangement is attached by which the voice of the speaker is thrown into the room with startling volume and distinctness. The latest scheme, however, is to have a fine band perform selected music, and to have the sound waves distributed to any number of subscribers. A family, club, or hotel can thus enjoy the finest music during or after dinner, and the effect will be as satisfactory as though the performers were in the apartment. It is stated that a large number of persons have expressed their willingness to become subscribers. There are, however, certain difficulties to be overcome in the modification of tone and timbre effected by the telephone. At present, for instance, the notes of the harp and the piano are alike over the wire. The characteristic of the reed, wood, and brass of the orchestra is not clearly defined, and the cornet is too obstructive. When this difficulty is overcome there will be no further difficulty in furnishing music on tap.

The utility of the electric light in preventing theft and in improving the standard of night work becomes increasingly apparent. It is stated that the cost of an installation for the purpose of facilitating the work in a somewhat cramped goods yard of a London station was entirely paid for by the amount saved through decrease in the annual robbery of goods. At another large goods depot the night traffic had so increased that everything was blocked. The goods' trains were stopping the passenger traffic, and it was impossible to handle it. At this juncture it occurred to the manager to throw more light into the goods' sheds and yards. The loading stages and the shunting grounds were practically flooded with light. The men worked with freedom; the hand lamps were set on one side, and the time occupied in handling them was bestowed on the actual work of loading and unloading the goods. The trains were soon disposed of, and traffic went on as usual.

In his Presidential address before the British Association at Leeds, Sir Frederick Abel drew attention to the great strides which have been made in electricity since the association met at Leeds in 1858. That year witnessed the accomplishment of the first great step toward the establishment of electrical communication between Europe and America, by the laying of a telegraph cable connecting Newfoundland with Valencia. Through this cable a message of thirty-one words was transmitted in thirty-five minutes, an achievement which excited the greatest enthusiasm and wonder. Submarine telegraphy had then just started into existence. News is now despatched at the rate of 600 words per minute, 110,000 miles of cable have been laid by British ships, and a fleet of nearly forty ships is occupied in various oceans in maintaining existing cables and laying new ones.

A statement having been made that nine telephone girls had gone crazy in New York city, the superintendent of a Chicago telephone exchange was interviewed for the purpose of discovering whether the Western telephone girls took more kindly to their work. He said that whatever grounds the superintendent might have for becoming insane, he could not see that the operators had any. He had never seen any signs of insanity in the young ladies under his charge; on the contrary, they were bright and efficient, and that was why he kept them. Some of them were "mad" when the introduction of the receiver that is strapped to the head was insisted on, as it was anything but ornamental; but that was only momentary.

It was, however, the nearest approach to insanity on record in the Chicago exchange.

Some interesting features will be seen in the new signaling station which is to be established at Tory Island, between Ireland and Scotland, which is expected to be of the greatest service to Atlantic steamers. A large cable has been laid between the island and the shore, the chief use of which will be to announce the passing of vessels and the transmission of telegrams from them. An ingenious buoy-like waterproof despatch case has been devised, which will contain any number of telegrams. This can be picked up by the boatmen from the island and conveyed to the signal station. The messages can then be telegraphed to any part of the kingdom, an arrangement which will be of the greatest convenience not only to travelers, but also to merchants and shippers.

A fortunate town is Trente, in Austria. Its electric light station is owned by the municipality, which has the advantage of the power of a large waterfall. The light is furnished to private consumers for about twenty cents a year per candle power, and they can burn the lamps one hour a night or twelve hours, just as they please, without extra charge. So as to enable the poor inhabitants to use the light, the town pays for the house wiring, payment being made by an annual charge. A flour mill and a spinning mill are already supplied with currents, and great activity is looked for in the local industries owing to its use by almost the whole of the community.

An accident has just occurred in Georgia which shows the necessity of the guard which is now generally fixed over the ventilating fans worked by electric motors. The manager of the engineering department of an electric light works had been superintending the putting in of a new exhaust fan, and was watching its first trial. As he was feeling the shaft to see if the journals were hot the suction drew his hand in, and in an instant it was cut off between the wrist and the elbow. The fan was revolving at the rate of 1,000 revolutions a minute, and it is said that the arm was cut off as clean as if it had been done by a knife.

## FIGHTING ON OLD OCEAN.

What The Nations are Doing in Naval Warfare.

Handling fleets in action and the general subject of signaling are points that are just beginning to receive their due consideration in all navies. The Constructive Departments, in designing recent ships which are to act as flag-ships, have not thought out sufficiently where the Admiral should be stationed in action so that he may have a clear, all-round view of the ships composing his fleet, as well as those of the enemy.

"The after bridge and signal deck," says *Broad Arrow*, "have no protection whatever, and they would undoubtedly be swept by the enemy's machine guns, which would speedily place the Admiral, his staff and the signalmen hors de combat, besides cutting the signal halliards and destroying the semaphores, flashing lights, and other signaling apparatus. Consequently, after one of our fleets, composed of ships as fitted at present, has received an enemy's fire, it is extremely probable that, even if the Admiral were not actually killed he would be of small service to the fleet during the remainder of the engagement, as his signalmen and signaling apparatus would most likely be in a very shattered condition."

The German Government's display at the forthcoming Royal Naval Exhibition is to be a complete selection of models showing the progress of their navy from its commencement. Among other objects of interest will be the Bauersches Taucherboot. This was one of the first submarine or driving boats ever built, and was designed by a German officer, who, with his companions, narrowly escaped drowning at the trial in Kiel Harbor. This interesting relic of early submarine naval architecture, after lying for years under water, was fished up and is now preserved as a curiosity by the dockyard authorities. The Government yard in Wilhelmshaven has among its exhibits a complete ship's cooking apparatus, hospital, officers' cabin, and dispensary as fitted on board a large man-of-war. The exhibition of life-saving apparatus for wrecks is very complete, and takes up a large hall, where the working of the rocket and other systems is very clearly shown. The machinery exhibits are also very complete from a naval point of view.

The new cruiser which was launched at Bilbao by the Queen Regent of Spain recently was christened the Infanta Maria Teresa. Her displacement is 7,000 tons, length 355 feet, and breadth 65 feet. She is expected to develop 5,000 horse power and to attain a speed of 20 knots. The armor belt is 12 inches thick, and she is to be armed with two 24-caliber breech-load guns and ten 14-centimeter breech-load guns. The auxiliary armament consists of eight 6-pounder quick-firing guns and ten machine guns. She has also eight torpedo-discharging tubes.

The French Navy is making progress in the heart of maritime aeronautics, and at Toulon there has been daily practice by way of experiment, with a complete pack of balloons. Judging by the newspaper reports, it is the greatest and most perfect line of aeronautics yet attempted. From a height of 1,200 feet the aeronauts are able to see all that takes place for a distance of forty miles.

A precocious little rascal was noticed on Jefferson avenue the other day making his best endeavor to ring a door-bell just beyond his reach. A well-known minister happened along and, with the impulses of a good Samaritan, wanted to help the boy.

"Like to ring that bell, sonny?"

"Yes, sir; but I can't reach it."

The divine stepped to the veranda and gave the bell a vigorous pull, as he patted the interesting juvenile on the head.

"Now run like the devil!" shouted the kid as he shot down the street at top speed. All the man could do was to laugh at this deplorable bit of worldliness and make explanation when the call was answered. —[Detroit News.]

## He Never Had It.

Miss Flora (forty-five, homely and unmarried)—Oh, Mr. Blunt, I had such a strange dream last night.

Mr. Blunt—What was it, Miss Flora?

Miss Flora—I dreamed that we were married and on our wedding tour. Did you ever have such a dream?

Mr. Blunt (energetically)—No, indeed. I never had the nightmare in my life!

## QUICK SIGNALS AT SEA.

A New System Devised by a British Naval Officer.

People who wish to visit foreign countries are carried over the ocean in the greatest possible comfort at a high speed and with almost absolute safety. There is only one thing wanting to make ocean travelling almost perfect, and that is a good system of signaling, whereby one ship can communicate with another by night as well as by day, and in thick as well as in clear weather.

Lieut. Crutchley of the Naval Reserve in England, has, with others, experienced the difficulty when meeting a homeward or outward bound fast steamer of getting any information from her, as in fine weather, with no wind, flags are indistinguishable when end on, and two or three hoists are the most that can be exchanged by vessels passing at speed. In consequence he has introduced a code of signals by which both men-of-war and merchant vessels can hold a brief conversation even in the short space of time that they are within signaling distance of one another.

Some of the codes now in use have many excellent features, but the one principally used, the international commercial code, is open to the objection that it frequently takes a long time to convey very little information, while at night there is no method of communication whatever beyond the ordinary distress, pilot, and private company signals. There are certain difficulties in the way of signaling by flags in the daytime. One is that there is no place about the ship where a flag large enough to be seen at a distance would be free from obstruction or clear of danger of being torn in sending aloft or hauling down. In the case of two steamers meeting with a combined speed of twenty-eight knots per hour the time for actual flag hoists is not much more than five minutes, as the vessels are approaching and separating at the rate of about a mile in two minutes. With a good distant signal and the Morse system this time may be very much extended and a great deal more work done.

To bring this about it is proposed, using "shapes" instead of flags, to be hoisted at the most conspicuous place, either gaff, yardarm, or stay, or in fact wherever they can be seen best by the approaching vessel. Such a system is not nearly so cumbersome as a set of signal flags; it can be worked by one man, and can be far more effectively used. The present code of letters could be adhered to as being more simple and less likely to cause a mistake. There are only two "shapes" to be used, a triangle and a ball. The former in altitude is less than the diameter of the latter. The ball is always to the right of the signaler. A pennant hoisted at any masthead means communication spelling, otherwise the commercial code is understood. A pause is made after each letter, and is indicated by both "shapes" being momentarily out of sight; a longer pause signifies the end of a work. Attention is called by a continuous bobbing up and down of the two "shapes," and is answered similarly.

Communication begins when both are at rest in the down position. Both hoisted means "Stop," or at the end of a sentence. The cone is used as the answering pennant after each sentence or code signal or word. The ball hoisted singly in place of the cone means "Repeat signal."

For night work a system of flash signals in which the electric light is called into play takes the place of the "shapes." A twenty-five-candle-power incandescent lamp is thought to be of sufficient power, and with the working apparatus handy on the bridge it can always be kept bearing on the vessel with which it is desired to communicate. There is a shutter worked by a lever which passes in front of the light and gives the long or short flashes at the will of the operator, and a handle at one side turns the standard on which the shutter works so that it can always be fairly presented to the observer aboard of the passing vessel.

The extensive naval manoeuvres of the past two or three years are held by the highest English authorities as emphasizing the necessity of making distinctive efforts toward increasing communication between vessels. The moment the evolutions were started it was found how even the imitation of war caused a dependence to be placed upon signaling that was not before realized as a possibility. Whether in communicating from ship to ship at sea or from the ships to shore and back again, it was made quite evident to all that existing arrangements were unsatisfactory and would inevitably lead to serious complications, if not disaster. It was conclusively proved that in the event of war breaking out it would be impossible to rely upon a hastily-devised system of communication, and that too much attention could not be given during these days of comparative inactivity to this all-important subject.

In criticizing the proposed code, Admiral Bowden-Smith remarked that he was one of those who thought that in case of war England's commerce and trade routes could be protected, and ought to be protected, by means of her magnificent string of coaling stations, and with the assistance of cruisers skillfully stationed at changeable rendezvous between those stations. To carry that out effectually the hearty co-operation of the navy and mercantile marine was necessary, and the way the latter could be of most assistance was by having some system of signaling whereby they could communicate on the principle pointed out by Lieut. Crutchley.

## Utilizing Niagara's Power.

The scheme for the utilization of the power of Niagara Falls, suggested by Sir William Thomson soon after the dynamo had been brought into commercial use, but rather as a dream of the distant future than as a practical hint, is already in a fair way to be realized. Contracts have been given out for the construction of the tunnels through which water will be conveyed to drive the great turbines, and Sir William Thomson and other scientists have been consulting for some time as to the best ways of utilizing the power. In spite of the waste from water wheels, dynamos and motors enormous power may be developed from the Falls and conveyed a considerable distance. How far it can be economically carried is a question to be determined not so much by electrical or mechanical difficulties in the way as by the cost of copper conductors. It is the cost of the conduit, so as to speak, increasing more rapidly than the distance traversed that will put a commercial limit on the utilization of Niagara's power in distant places. But there is no doubt that it can be used with great advantage in the immediate neighborhood mainly because of recent discoveries in electrical science.

Bonnets and hats of two kinds of straw, open and close, bid fair to be popular.