The Automobile

TAKE CARE OF AUTO FENDERS.

An auto with shabby fenders looks like a man with worn-out shoes, dirty and unpressed clothing, or without a collar and tie. Auto fenders become ugly through neglect. They receive scratches and bumps, get out of shape, and become full of holes because of rust. It is not unusual to see auto fenders rusted through.

Rust usually begins its work underneath. Flying stone and gravel, caked mud and vibration all serve to remove the paint or enamel. The oxidization of the metal, or rust, sets in at once. The unobserving man does not know about this destructive work until all of the metal is eaten away from the film of paint or enamel on top.

Automobile fenders should be carefully washed occasionally and all spots from which the original paint or enamel has been removed, painted. If you have a collision and damage a fender, hammer out the dents and paint the scratched places as soon as possible. The fender will look better and at the same time rust will be prevented.

OILING THE SPRINGS.

It is only recently that the necessity for oiling automobile and truck springs has become known. The difference in riding on oiled and on rusty springs is very pronounced indeed.

In oiling springs, however, one difficulty is encountered. Dust will adhere to the sides of oiled springs and finally work between the leaves themselves. Also, when muddy roads are encountered, mud will be thrown on the springs; it will dry, and then absorb all the oil on springs.

To overcome this difficulty, wrap the springs of the car with adhesive tape. The springs are first thoroughly washed and dried. Then the jack is placed under the frame of the car and the body is raised This allows the weight of the axles and wheels to pull down on the springs and thus separate the leaves so that grease can easily be inserted with a putty knife.

After the springs are greased, the weight of the car should be placed on the wheels again. The leaves of the springs will come together and push out surplus grease. This should be wiped off, after which the springs may be wrapped with the tape. Wrap carefully, allowing plenty of lap. If the tape will not stick well at the beginning or at the end, use shellac to hold the ends in place. Coat the entire wrapping with shellac after the job is finished.

Building Raised from Common Clay.

Brickmaking was one of man's earliest pursuits. Babylon was acquainted with the art; and it is recorded that the Israelites baked bricks from clay mixed with chopped straw.

Nowadays, for ordinary building purposes, red bricks are in greatest demand. These are produced from many kinds of clay.

In the first place, the rough clay is sent from the "pit" to the top of the plant. Here it is ground to powder, and passes through a fine sieve to the floor below. The powdered clay is then fed into the brick-press, where it is watered to a workable plasticity, emerging eventually pressed to a perfectly formed, solid brick.

The color is now dark grey. Not until after heating does the brick become red. Redness is due to the presence of iron compounds in the clay, which when burned transform to free ferric oxide

The bricks are placed in the kiln chamber, which is then built up. Hot air is allowed to enter so that a thorough drying is effected. After drying, the hot air is withdrawn.

Fire is next introduced. Burning usually takes a week. During that time firing is maintained day and night through feed-holes in the kiln top.

Not all materials, however, can be treated in this simple fashion. Highly plastic clays require molding, and many elaborate preparations are necessary. Among these are "weathering," and the addition of non-plastic matter to reduce shrinkage. Crushing, grinding and pugging are also essential preliminaries.

A brick's quality should be such that it will not succumb to the vagaries of our climate. The faces will be free from the slightest crack, and the edges square.

Taking Every Precaution.

On going into the playground one day, the schoolmaster found one of his small pupils sitting on another, who was lying prostrate on the ground.

"O Billie," he said, "haven't I always told you to count a hundred before you give way to temper. And here I find you sitting on Tommie's head. What have you to say?"

The child looked solemnly up at him. "Im counting the hundred, sir," he said. "I really am, but I'm sitting on his head, so that he'll be here when I've done counting."

Shoulder Blades Hold Secret of Longevity.

Your chances of a long life may rest on your shoulder blades. Dr. William W. Graves of the St. Louis University school of medicine in an address before the American Association far the Advancement of Science in Washington recently declared that long-lived people most often have convex shaped shoulder blades, while the shorter-lived most frequently have shoulder blades of the straight or concave type.

Describing the proper use of the X-ray and other methods of classifying these bones, he pointed out that no natural process or circumstances changes one type into another during the lifetime of an individual, and that in no feature do members of a family more closely and more frequently resemble each other and at the same time one or both parents than they do in the type of their shoulder blades.

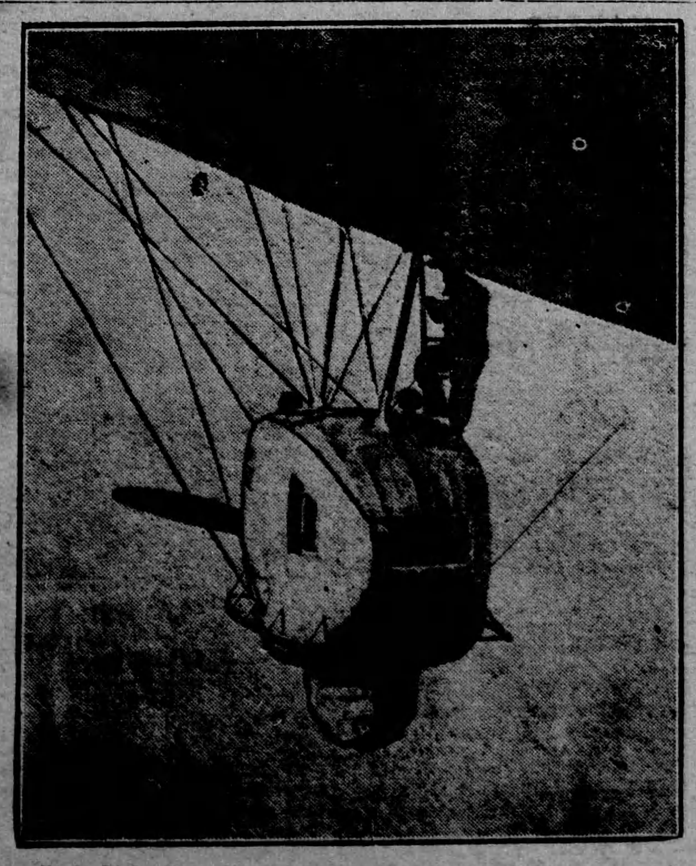
Each of the three types of shoulder blades is found in varying degrees and percentage in all human types regardless of race stock, sex, age, occupation, social level and environment. Examination of large numbers of living persons and skeletons of known age, however, show that the proportion of convex shaped blades increases with the age of the persons examined, Dr. Graves said. The inference he drew from this was that the shorter lived people, those most likely to become sick, are most likely to have the straight or concave type of shoulder bone than the convex.

Sums at Lightning Speed.

A French lightning calculator, M. Inlaudi, was recently pitted against twelve of the latest type of calculating machines. The human machine carried off all but one of the honors.

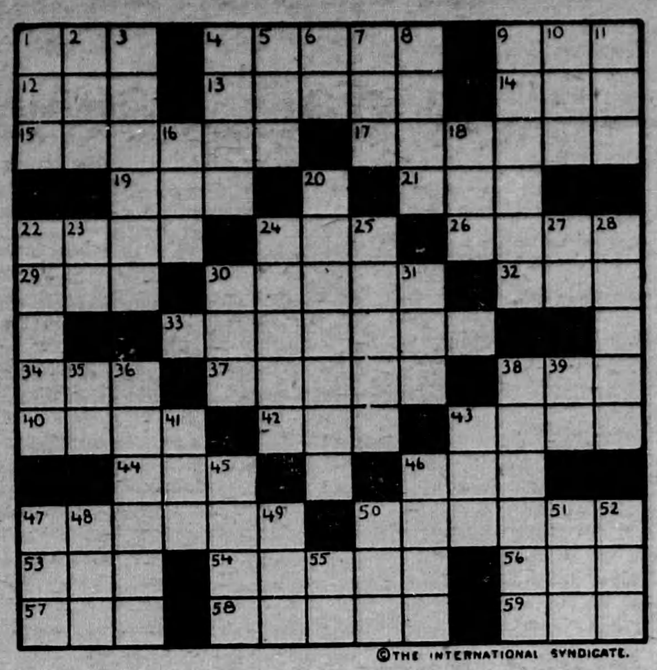
M. Inlaudi easily beat his mechanical competitors in the speed with which he solved problems in addition, subtraction, division and finding the square or the cube, but in the first round—extracting the square root of a number—a machine came out first. In the third round, which consisted of complicated problems, the man won easily.

I never knew a night so black light failed to follow in its track; I never knew a storm so gray it failed to have its clearing day; I never knew such bleak despair that there was not a rift somewhere; I never knew an hour so drear love could not fill it full of cheer!—John Kendrick Bangs.



W. L. Richardson, who was in charge of the aerial photography unit on the dirigible Los Angeles, climbs down from the great gas bag to one of the engine cabins from which he took pictures of the eclipse.

CROSS-WORD PUZZLE



©THE INTERNATIONAL SYNDICATE.

SUGGESTIONS FOR SOLVING CROSS-WORD PUZZLES

Start out by filling in the words of which you feel reasonably sure. These will give you a clue to other words crossing them, and they in turn to still others. A letter belongs in each white space, words starting at the numbered squares and running either horizontally or vertically or both.

HORIZONTAL

1—A dolt
4—To take oath
9—Article
12—In the past
13—Handle of an axe
14—An element
15—A water-sprite
17—A feast day
19—To drink with the tongue
21—A division of land
22—To surfeit
24—A cleaning implement
26—Curved
29—Not elevated
30—Bravery
32—Fish eggs
33—Friendly
34—To plant
37—To twist violently
38—An animal
40—A fish
42—Still
43—The two
44—Tear
46—A place to sleep
47—A mark
50—Warmed
53—Rage
54—Soothed
56—Metal-bearing rock
57—Writing implement
58—Lying flat
59—Novel

VERTICAL

1—A tree
2—Number of years
3—To pursue
4—Large boat
5—Tiny
6—A letter
7—Hail
8—Genuine
9—Loose hanging rag
10—Hasten
11—To make a mistake
16—Compensation
18—Convulsive cry
20—A defender
22—Group of pupils
23—An exclamation
24—To join
25—The end
27—Negative
28—Used for chewing
30—A pledge
31—A bit of cloth
35—An exclamation
36—Home of an animal
38—Agricultural product
39—Close by
41—To excavate
43—A serpent
45—To look slyly
46—To grant
47—A gratuity
48—Existing
49—Material for calking
50—A fowl
51—Beforehand
52—Precipitation
55—In this manner

A Leg For Sale.

In a lively book of reminiscences, Thirty Years at Bow Street, Mr. William T. Ewens tells an amusing story that he heard from an old man who lived in Bow Street in the rear of the police courts, with whom the author often had a bit of conversation.

"When I was a young fellow," said the old man, "I started to walk from Covent Garden to the Angel at Islington. There were fields in those days where you now see nothing except shops, and I enjoyed the walk immensely. I could run and jump at that time as well as anyone in London, and so when I came to a stile I did not trouble to climb over. In trying to jump it, however, I miscalculated the distance and came an awful cropper. Who picked me up I Idon't know. When I regained consciousness I found myself in a hospital. I was in awful pain, for I had hurt my leg badly. I was in the hospital for weeks.

"During that time I was visited by some of the most famous surgeons in London. My case puzzled them considerably, and I heard them say that there had been nothing like it before. Among the people interested in my leg was an old doctor who had a good practice in the region of the Strand. On one of his visits he said, 'I shuld like to have your leg.'

" 'Oh, would you?' said I. 'I want it myself if you have no objection.'

" 'I understand that,' said the doctor, 'but I should like to have your leg when you have done with it. There has been nothing like it before, and I don't think you will want it for very long.'

" 'Thank you for nothing,' said I. 'Im going to get better, and the very day I leave this place Ill walk you to Ludgate Hill for anything you like.

"The old doctor did not take me on, but he pestered me to or three times a week to sign a paper authorizing him to have my injured leg on my death. He even offered to give me twenty pounds if I would sign. I pondered long over his proposal. You see I had nothing else to do, and, as it was evident that my leg would be no use to me after my death, I finally consented to his terms. The doctor brought me a paper one morning, and I signed it. He gave me ten pounds down, and I was to have the balance in due time. From that moment I began to mend and soon afterwards left the hospital in comparatively good health, though I was slightly lame and always shall be.

A Warning.

Asylum Visitor—"The patient in the padded cell has a most remarkable vocabulary. Most of the words he uses are marked rare or obsolete in the dictionaries."

Doctor—"Poor fellow! He got that way trying to solve cross word puzzles."

Plant That Maddens.

Among the curious plants of Queensland is the "stinging tree," a luxurious shrub, pleasing to the eye, but dangerous to the touch. It grows from two or three inches to ten or fifteen feet in height, and emits a disagreeable odor.

Speaking of its effects, a naturalist says: "One often forgets the danger of the tree until warned by its smell. Its effects are curious. It leaves no mark, but the pain is maddening, and for months afterwards the affected part is tender when touched in rainy weather or when it gets wet in washing.

"I have seen men who treated ordinary pain lightly roll on the ground in agony after being stung, and I have known a horse so completely mad after getting into a grove of the trees that he rushed open-mouthed at everyone who approached him.

She—I love to take a tramp over the frozen snow."

He—"Meaning whom?"

One Hundred Years Old, 86 Years in French Family

Eighty-six years of service in the same family is the record which Victoire Desrumeaux, a domestic, celebrated on the occasion of her 100th birthday, says a Paris despatch. The French papers are losing no opportunity to comment on this remarkable example of fidelity in view of the modern custom of maids and cooks changing their positions almost monthly—often merely for the sake of the change.

Birds' Eggs as Jewelry.

Necklaces of wild birds' eggs are now being made. The eggs are paired for size, and after blowing are treated by a chemical process and the insides filled with a light-weighted composition to give them solidity. As the shells all have different markings, novel effects are produced. The prices vary from $25 to $5000 and more.

Avalanches in Switzerland

By John A. Cass.

The Swiss people call them "louwine," and they are sometimes so called in English; as when in one of his poems Lord Byron spoke of the mountains as place, "Where roar the thundering lauwine," though he probably meant no more than the snow avalanches which are frequently seen in summer by the traveler.

The word has a broader meaning, however, and includes those enormous masses of earth and rock which not infrequently become loosened from the cliffs and descend into the valleys, carrying death and destruction far and wide.

In some parts of the country avalanches of either sort are so likely to occur at any time that the people guard against them by planting extensive forests on the hillsides, and in some cases strong bulwarks of masonry have been erected between the towns and the mountains.

Despite all precautions, however, it is not unusual for lives to be lost and single houses to be destroyed, and there are cases on record where entire villages have been buried beyond all possibility of excavation.

On the Bernina Pass, a great highway which leads from Switzerland to Italy, the traveler still has his attention directed to the spot where, many years ago, a village named Mille Morti was buried by an evalanche of earth and rock from the slope of a neighboring mountain. Very little is known concerning the disaster, for it is one of those sad cases where neither man, woman nor child escaped to tell the story.

On the road from the Italian lakes into Switzerland by the great Maloja Pass one sees the site of a catastrophe even more appalling than that already mentioned; more appalling because more extensive.

The village of Plurs must have been very pleasant for situation, for in front of it a mountain torrent kept up its unceasing roar, while at a little distance in the background rose the high cliffs of Monte Conto. It must have been a prosperous town, too, for early in the seventeenth century it sheltered a population of twenty-four hundred and thirty souls. In the autumn of 1618 it was noticed that masses of earth and rock fell with unusual frequency, and a number of fissures were seen to form and widen in the mountain. But the people, disregarding these admonitions, continued their usual pursuits till one night a terrific landslide buried them and their possessions beneath a pile of debris more than sixty feet deep.

So utter was the destruction that no attempt has ever been made at excavation, and the spot is now covered with a beautiful grove of chestnut trees, among whose branches the nimble squirrels play, and at the foot of which boys and girls now search for nuts.

Another example, not so destructive to life and property, but more striking, from its having twice happened in the same place, may be noticed in the valley which leads to the village of Zermatt. Here, in 1737, a little town of one hundred and forty houses was completely destroyed by an avalanche of snow from the Weishorn Mountain.

Years passed, and the snow had all melted, the debris had been cleared away, and another and larger village was built on the same spot. Here the people lived in peace and safety, and had perhaps quite forgotten the first disaster, when suddenly, one afternoon, in 1819, another avalanche of ice and snow from the same mountain came down upon them, burying one hundred and eighteen houses, together with many people. The house of the village pastor stood a little apart from the others, and so escaped destruction; but such an enormous quantity of snow was lodged in his garden that it did not entirely disappear till two years later.

Returning now to the region of Eastern Switzerland, we find another case quite unlike any that have yet been mentioned.

Many years ago, what was known as the Forcola Pass, the little town of Le Rovine stood at the foot of the towering mountain. It contained about three hundred inhabitants, who were occupied as cattle-herders and farmers, besides carrying on quite a business in the way of entertaining people who were obliged to pass that way. They had, however, come to have a bad reputation, and were supposed to be capable of almost any crime. Travelers who were obliged to spend the night here were provided with only the meanest food, but were compelled to pay for it the most exorbitant prices.

Indeed, the catalogue of evil deeds of which the people of the town were guilty was a long one, and it is said that they were frequently warned that some terrible judgment would be sent upon them unless they reformed.

Be that as it may, it is certain that on June 13, 1486, an earthquake shook the mountains violently, and a fearful avalanche buried the town, with all its inhabitants, in one common grave.

But the most remarkable instance of such disasters yet remains to be spoken of.

In the very centre of Switzerland, not far from the famous city of Lucerne, is a tract of country bearing the general name of Goldau. It included several villages, whose situations were of extreme beauty, for in front of them lay the charming little Lake of Lowertz, and behind them rose the Rossberg Mountain to a height of more than five thousand feet.

This mountain consists of layers of conglomerate rock, made up of rounded limestones mixed with flinty pebbles imbedded in a sort of calacreous cement, alternating with layers of sand three or four feet in thickness. Not infrequently these sand-beds become disintegrated by the action of water percolating through them, and masses of rock deprived of their support in this way, are occasionally precipitated into the valley. It was this on a large scale that caused the disaster.

The summer of 1806 had been an exceptionally rainy one, and on the second of September, a stratum of rock measuring more than two miles in length, three thousand feet in width and one hundred feet in thickness, became loosened, and fell upon the doomed villages from a height of three thousand feet. Four villages were utterly destroyed, and upward of five hundred people were buried beneath the ruins.

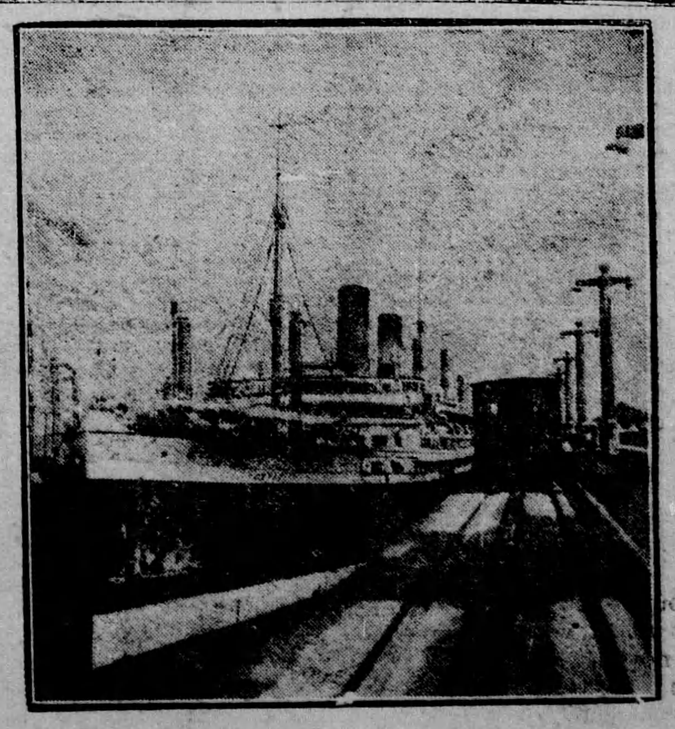
Nor did the destruction end there, for the avalanche swept resistlessly in till it reached the lake, one-fourth of the bed of which was filled up by the debris, while the islands were totally submerged, and a wave eighty feet in height broke upon and destroyed all the buildings on the opposite shore.

These are but a few of the instances in which the mountains have sent down ruin upon the peaceful valleys of this lovely land.

But, notwithstanding all this, the country is a prosperous one. The people possess an energy which does not quail readily in the face of difficulties.

After the avalanche comes the patient hand of man, and ere long the scenes of such terrible disasters again become the abode of an industrious community.

Even Goldau itself has been rebuilt. A new church stands on nearly the exact site of the one that was buried, and the only reminders of the catastrophe of 1806 are a tablet, with an inscription, set in the wall of the present building, a deligious service held once each year in commemoration of the event, and the deep and ineffaceable scars which show the track of the avalanche down the Rossberg's stony side.



The Canadian-Australian liner "Aorangi," making its maiden voyage from England to Australia, via California, British Columbia, is shown passing through the Panama Canal. She broke all time records on the first part of the journey.