

# CHAPPED HANDS & COLD SORES

One thorough application of Zam-Buk at night will bring ease by morning. Zam-Buk stops the smarting, heals the cracks, and makes the hands smooth.

**PROOF**—Miss Hattie Fortrand, Galesburg, Ont., writes:—"I was troubled with chapped hands and arms and nothing ever seemed to heal them thoroughly until we found Zam-Buk. It has cured them. My father has also used it for several skin troubles and injuries, and thinks there is nothing like Zam-Buk."

Mothers should see that their children use Zam-Buk daily, as there is nothing like prevent on. A little Zam-Buk lightly smeared over the hands and wrists, after washing, will prevent chaps and cold sores.

Zam-Buk is also a sure cure for skin diseases, eczema, itch, ringworm, dandruff, piles, and for cuts, burns and bruises. See box and stores and druggists, or post free for Zam-Buk Co., Toronto, for price. Refuse harmful substitutes and imitations.

## ZAM-BUK

EVERY HOME NEEDS IT.

### IRON OF THE ANCIENTS.

Pillar in India Has Stood Rustless For Centuries.

On the plains of Delhi, in India, there stands a massive iron pillar, nearly sixty feet in length and weighing about nineteen tons. This ancient column is literally a monument to the "antiquated" processes and metallurgists that produced it, for it has resisted the attack of the elements during a period of about 2,900 years, in which fully a million times its bulk of iron or steel has crumbled into useless dust. No one would suggest that civilized man return to the primitive and laborious methods by which the iron of this column was made so long ago, and besides, there are not men enough living today to supply our present demands even if all of them should engage in this type of manufacture; but, granting that the world would pay for a limited amount of iron as "passive" as this old Kutub pillar, it is very doubtful whether modern ironworkers know how to make it.

Probably this specimen of unusual iron is the result of accident rather than design, as far as its resisting qualities are concerned, and it stands today the survival of the fittest, not so much because it was intended to be, as because it proved to be the most lasting, for it is not likely that a process known to give iron of this kind would ever have been used so long, since the importance of a rust resisting iron and steel was as much appreciated in those days as now. No doubt all the older processes made iron and steel which rusted less—yes, and some of it very much less—than what is usually produced today, but there is a great difference between this more excellence and a resistance to corrosion during thirty centuries such as this column shows. —Bradley Stoughton in Engineering Magazine.

### TWO POINTERS ON HOW TO CURE A COLD

When you begin to sniff and feel a burning sensation in the nasal passages, or when a tickling irritation in your throat starts you coughing, the first important thing is to act at once. It's the neglected cold that becomes troublesome and dangerous.

The second important thing to do is to take Na-Dru-Co Syrup of Linseed, Licorice and Chlorodyne, and keep it up till the cold disappears entirely.

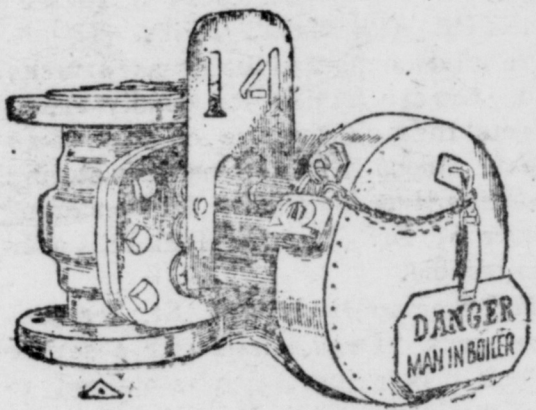
Na-Dru-Co Syrup of Linseed, Licorice and Chlorodyne is absolutely free from harmful drugs, and can safely be given even to moderately young children. It is pleasant tasting and quick acting, promptly relieving the irritation of the throat and nostrils, loosening the mucus, promoting expectoration, and checking the cold.

Your druggist has Na-Dru-Co Syrup of Linseed, Licorice and Chlorodyne in 25c. and 50c. bottles, or can quickly get it for you. Compounded by the National Drug and Chemical Co. of Canada, Limited.

### SAFETY FOR WORKERS.

Locking Device to Protect Men Working in Boilers.

The Industrial Safety association suggests the device here illustrated as a safeguard for men working in boilers, says Popular Mechanics. Live steam has more than once been turned by mistake into a dead boiler where men were working, and with fatal results. When a number of boilers deliver steam to a common main there is always a shutoff or throttle valve to cut each boiler out of service and



SAFETY LOCKING DEVICE IN PLACE.

isolate it from the steam line, and it is for such a valve as this that the safeguarding device is designed.

It consists of a split and hinged steel cylinder, which may be slipped over the hand wheel of the stop valve and locked in place by means of a padlock. The key is given to the man who enters the boiler, and as long as the cylinder is on the stop valve it is impossible for any one to turn on the steam.

#### Seasoning Wood by Electricity.

The following item from a British technical paper concerns a new process of seasoning wood by electricity in France:

A large tank is filled with a solution containing 10 per cent of borax and 5 per cent of resin, with just a trace of carbonate of soda. In the bottom of the tank is a lead plate which is electrically connected to the positive pole of the dynamo. The timber to be treated is stacked on this plate, and when the tank has been filled another plate is superimposed and connected to the negative pole of the dynamo. When the current is switched on it passes through the stack of wood between the two plates, and in its passage it is said to drive out the sap in the timber and deposit borax and resin in its place, completely filling up all pores and interstices. When the process is completed the timber is removed and dried, after which it is ready for use. It is claimed that the timber submitted to this treatment, no matter how green it may be, becomes completely seasoned.

#### Gasoline Tool Car For Railways.

The Chicago and Rock Island railroad is using a gasoline car to convey men and tools to any point where repairs or construction work are needed. The car not only transports tools and men, but carries the necessary power

men, and for operating electric tools. A thirty-horsepower four cylinder four cycle gasoline engine drives a generator which supplies power for operating electric tools. These tools are two electric spike screwing machines, six electric drills, one electric saw for rails and portable emery wheels. The car can carry eight to ten men and any reasonable equipment of tools.

#### Liquid Slag From Foundries.

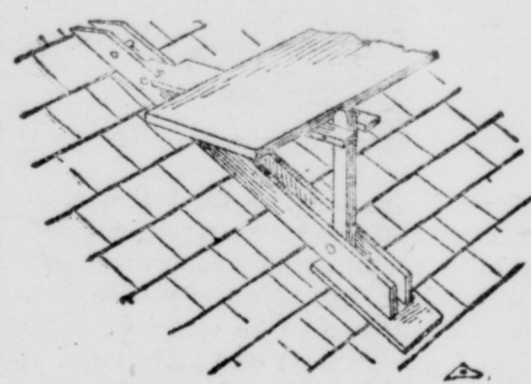
At the experiment station of the United States bureau of mines, Pittsburgh, Pa., trial runs have been made with a gas producer using coke as fuel, with which limestone has been mixed in varying proportions, the purpose being to flux the ash and form a liquid slag, thus avoiding clinker and ash troubles and consequent shut downs.

#### SCAFFOLD BRACKET.

Nonslipping Device Insures Safety of Scaffolding.

Almost 40 per cent of the accidents in building operations are due to inadequate construction of false work and scaffolding. In building frame structures accidents of this nature show even a larger percentage, says Popular Mechanics. The fault is not always laid at the door of the contractor, for workmen will often take risks that endanger their lives without any good reason other than to save time and labor. A carpenter who builds his own scaffolds is often as careless as any one in this respect.

Shingling roofs is even more risky than framing the house. Where the pitch is sharp the risk is greatly enhanced. In repairing roofs a good



NONSLIPPING BRACKET.

many carpenters do not even go to the bother of building scaffolds, but depend upon their ability to hold themselves on the slope. If one had folding brackets, which would make roof shingling simple and safe, fewer accidents of this nature would be recorded. A carpenter with a pair of folding brackets as a part of his equipment would never be in danger of slipping or sliding from the roof while shingling. His equipment would consist simply of a pair of brackets and a board.

The brackets, as illustrated, are made to fold up and are self sustaining. That is, the board which fits flat against the slant of the roof is spiked to cling to the surface and it would take a good deal to break it loose from its moorings. The spikes are made of ordinary screws with the ends protruding one-quarter of an inch beyond the flat board and filed to a sharp point. Three of these at the lower end of the bracket and two at the upper end serve to hold the brackets firmly in position. A slight tap of a hammer will drive the brads in sufficiently and when the scaffolding board is placed across the brackets the thrust, being downward, tends to push the points of the spikes deeper into the wood surface. A pair of brackets of this nature will sustain the weight of several men working on the same board. The illustration shows clearly the construction of each bracket.

#### A WONDERFUL CLOCK.

Radium Driven Timepiece Could Run For Centuries.

It is claimed that if not touched the radium timepiece invented by the Englishman, Harrison Martingale, could run for 30,000 years. On a quartz rod, in an exhausted glass vessel, is supported a tube containing a small quantity of radium. An electroscope is attached to the lower end of this tube. It consists of two long strips of silver. The natural action of the radium sends an electric charge into the strips and causes them to separate until they touch the sides of the vessel, where they are instantly discharged and fall together again. Every two minutes this operation is repeated automatically, so that each beat of this wonderful timekeeper is in reality two minutes long.

The most trustworthy clock in the world is said to be that in the basement of the observatory at Berlin, installed in 1865. This clock is inclosed in an air tight glass cylinder and has frequently run for two or three months, with an average daily deviation of only fifteen one-thousandths of a second. Yet astronomers are not satisfied even with this remarkable accuracy, and their efforts are constantly in the direction of more ideal conditions for a clock, by keeping it not only in an air tight case, but also in an underground vault, where neither changes of temperature nor of barometric pressure can ever affect it.

#### To Repair Tungsten Filaments.

As persons using the brilliant tungsten filament electric lamp have reason to know, they are easily broken by a sharp jarring of the bulb. So delicate is this tungsten burner that in spite of the better light many householders feel they cannot afford them, or, if using them, make sure that they shall hang pendant from a height above the ordinary chance of one's striking the chandelier with head or broom handle or duster. Recently an inventive person has discovered that in the case of a broken tungsten filament a light tapping of the bulb, allowing of the broken ends to come in quiet contact from the vibration, will result in the filament's broken ends coming in contact and fusing fast again. Of course the current at the time must be turned on.

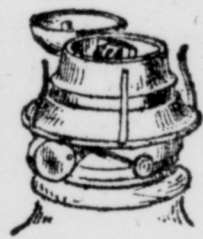
#### Cork Varnish For Ships.

In order to protect the interior of ships from the humidity caused by condensation upon the metallic walls during sudden changes of temperature the Italian marine has experimented with a kind of hydroscopic varnish, or coating, the essential compound of which is ground cork, which is consolidated by pressure with copal and litharge and applied to the walls. It has been found that the cork varnish absorbs the watery vapor of the atmosphere to the extent of eight or nine grams for every square meter of surface exposed.

#### LIGHTING ATTACHMENT.

Device Ignites Lamp Wick by Turning Thumb-screw.

The lighting of kerosene lamps is usually quite a bother for the reason that the lamp chimney must be removed, and if this is hot it is necessary to wait for it to cool down. In order to facilitate the lighting of the lamps an inventor living in Colorado has devised a scheme by which the ignition may be accomplished by merely turning a thumb screw. An igniting strip is used in the form of a roll, which is fed from a casing to the wick of the lamp. In the process of feeding the strip to the wick it is



KEROSENE LAMP LIGHTER.

dragged across a roughened surface that ignites the strip so that it is carried adflame to the wick.

The accompanying drawing shows the mechanism quite clearly. The igniting strip is provided at intervals with protuberant ignitable beads. The scratching element which ignites these beads by friction bears against the upper surface of the strip immediately over the feed roll. The main body of the strip is incased in a heat proof compartment, so that there is no danger of setting it afire with the heat of the lamp. One of the advantages of this construction is that it may be used in connection with a lantern to ignite the wick in windy places where a match cannot conveniently be used.

#### OPOSSUM FARMING.

Animals to Be Grown For Fur in Various Parts of Australia.

The director of the zoological gardens at Sydney, Mr. Le Souef, states that since the first of the year some important plans for opossum farming have been projected in different parts of Australia.

One farm exclusively for opossums has been started in Gippsland, Victoria, which comprises 2,000 acres of eucalyptus "bush land." Another farm comprising 500 acres has been started in southern Tasmania, and another of 150 acres in New South Wales. The chairman of the Sydney Stock Exchange has become much interested in the possibility of commercial breeding of opossums for their fur and expects to start a large farm for this purpose near Sydney. In Western Australia there seems prospect of a company being formed for the breeding of opossums on a stretch of eucalyptus country comprising about 200,000 acres.

Many instances are also being reported of farmers in various parts of Australia taking up the breeding of opossums as a special feature of their farms, in this way utilizing the timbered sections of their land which would not have much value for any other purpose. The advantage of breeding opossums in wooded or scrubby country not profitable to clear is apparently being recognized, and in time it seems likely that the Australian opossum, instead of being hunted and rapidly exterminated, will be carefully bred on farms and become an important commercial asset to Australian farmers.—Consular Report.

Famous  
for  
Fifty Years  
CHASE &  
SANBORN'S  
COFFEES

SEAL  
BRAND  
IS THE  
HIGHEST GRADE

CHASE & SANBORN  
MONTREAL

### SAVED THE COLORS.

A Hero Who Was Buried Wrapped in His Flag by the Enemy.

During the Austro-Prussian war a body of Prussian soldiers came upon a ditch half full of wounded and dying Austrians. Among those who were badly wounded was a young officer. They found him lying on his back in the wet ditch. Touched with pity for him, some of the Prussians went to him and wished to remove him so that he might be attended to by the surgeon. But he besought them to leave him alone, telling them that he felt quite comfortable. Soon after this he died. Then when they lifted his body they found why he had begged them to leave him alone. He had been the standard bearer for his regiment.

In the terrible battle of the day the flag had been torn into tatters, and when he was sore wounded so that he soon must die his soldier spirit was still strong within him, and rather than let the "bit of rag" fall into the enemy's hand he folded it up and placed it beneath him so that none might see it. This was why he would not let himself be moved by the kindly Prussian soldiers. He would die protecting the precious flag.

His foes were so touched by his noble action that they would not take away the trophy, but wrapped it around him that it might be buried with him.

#### New Zealand's Sulphur Island.

One of the most extraordinary islands in the world lies in the bay of Plenty, New Zealand. It is called White Island and consists mainly of sulphur mixed with gypsum and a few other minerals. Over the island, which is about three miles in circumference and rises between 800 and 900 feet above the sea, there continually floats an immense cloud of vapor attaining an elevation of 10,000 feet.

In the center is a boiling lake of acid charged water, covering fifty acres and surrounded with blow holes from which steam and sulphurous fumes are emitted with great force and noise. With care a boat can be navigated on the lake. The sulphur from White Island is very pure, but little effort has yet been made to procure it systematically.

#### Where Three States Corner.

One of the most lofty mountain regions of the Appalachian system, recently surveyed by the United States geological survey, is depicted in detail in a topographic map which the survey has just published—the map of the Abingdon quadrangle. This map is on the scale of approximately two miles to the inch and shows an area of a little over a thousand square miles, embracing portions of southwestern Virginia, northeastern Tennessee and northwestern North Carolina, the three states cornering in the southern part of the quadrangle.

#### Viennese Electric Fountain.

The city of Vienna possesses what is, perhaps the most remarkable electric or electrically lighted fountain in existence. It is situated in the Schwarzenbergplatz. Underneath the fountain, in a huge cemented chamber are placed twenty-seven reflecting lamps, capable of producing seventy different luminous and colored effects. The light is transmitted through the waters of the fountain. The light power of the plant is estimated as equal to 600,000,000 candles.