Loss of Consciousness Up ashore he can do so in a manner that will always be remembered favorably by the Among the Clouds

THE flying man's ills are beginning to be catalogued, according to an article in "The Medical Record." Take the air accidents about which there remains a mystery. A British surgeon is quoted as believing that "in a large proportion of these mysterious crashes the cause is loss of consciousness by the pilot."

"He has had at least four cases of pilots completely losing consciousness in the air. Two of these 'crashed' on trying to land, which apparently they did subconsciously, without severe injury to themselves, the other two both lost consciousness at a height, subsequently regaining it, and were able to recover control of the machine and make safe landings, both feeling extreme-

"He has often noticed how greatly any slimentary disturbance becomes exagger-sted in the air, and several cases of vomiting while flying have occurred apart from restibular vomiting experienced by some pilots on extremely 'bumpy' days. In these ases also the pilot, on questioning, has admitted having had slight indigestion before

"A common cold when accompanied by much masal catarrh will often give rise to great trouble at a height, and especially during rapid diving, and several times pilots with this condition have come for adite, wishing to ascribe their symptoms to a 'lack of oxygen,' but with the curing of the cold the trouble ceases."

Pneumonia

DNEUMONIA has been so common among miners whose work keeps them underground ten hours a day or more, that an abnormally large percentage and a high death rate as compared with the number of cases among aboveground workmen have been taken for granted as unavoidable, says an article in "The Medical Times":

"Researches have shown that the prevalence varies greatly. In some mining regions the death toll is high; in others it is scarcely above normal. In one mine it may be, perhaps, far in excess of that in another near by. In coal mines carbon dioxide, carbon monoxide, methane, sulphur dioxide and other gases have been alleged causes-and doubtless these gases have been fruitful sources of disease and death. Intemperance and unsanitary conditions have likewise contributed to make a high death rate. Indeed, practically every one of the causes alleged in various mines and various localities may be said to have been substantiated. In the South African mines, where the underground work of drilling, collaring, blasting and shovelling is carned on in quartzite and other quartz-bearing rock, the initial cause of the is sharp-edged drill dust; and although the immediate and apparent cause of death may be an acute attack of pneumonia behind the pneumonia is an advanced stage of tuberculosis; and behind the tuberculosis is a pair of lungs raw and irritated because of the accumulation of millions of sharpcutting particles of quartz dust.

"The condition of the lungs, ingested and congested with quartz dust, is aptly termed he broad sense of the word silicosis might be called a disease, as well as a condition. The fine particles drawn through the bronchii and their ramifications during repeated inhalation finally insinuate within the walls of the air vesitles of the lungs. The results are twofold, in the first place the accumulation of fortign matter prevents normal aeration; in the second place, the cutting and irritant action of the silicious particles brings about * fibrous growth which is nature's attempt to encyst them. This further reduces the power of aeration by diminishing the aerating surface. The advanced stages of siliis are characterized by shortness of breath and labored breathing. A pair of lungs congested with silicious dust, raw and bloodshot, is ready to catch anything: and tuberculosis is just behind the bat."

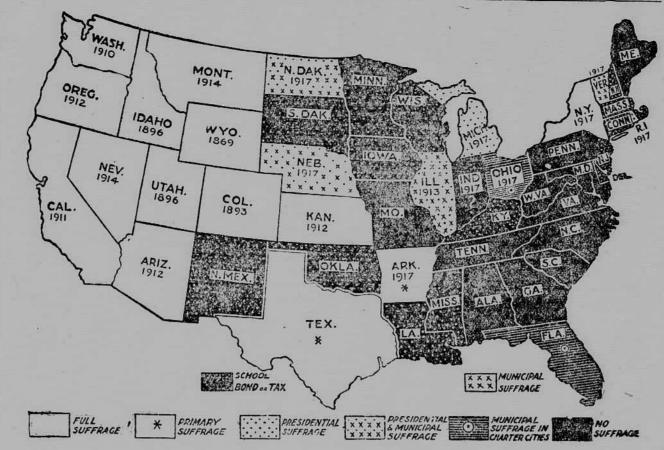
Wound Shock

MUCH has recently been written of "shell shock," but quite as important is the handling of wounded men in order to minimize what is known as "wound shock," according to the digest of an article in "The New York Medical Journal." In the opinion of the three authorities cited, everything could be done in the way of treatment which will promote the restoration of a normal and stable flow of blood. And further:

The wounded man should be guarded Tainst loss of heat from the very first. First aid dressings should be applied with as little exposure as possible, a hot drink should be given at once, and the patient should be carefully wrapped in a blanket, which should be carried, dry, along with erery stretcher, and a dose of sixteen milli-(grain one-fourth) of morphine might be given orally by the orderly if there is much pain. The patient should then be carried rapidly to the regimental aid post where his general condition should inst be attended to, to be followed by atention to his wound. He should be transferred to a stretcher provided with three blankets so folded as to give four thicknesses of blanket both above and below the stient. A few ounces of hot fluid should he given as soon as the patient arrives, his set boots and puttees should be removed, with other clothing if it covers wounds. During this time he should be lying on the try stretcher, one of the biankets of which allowed to fall downward on either side 4 form a warm chamber with the help of a store placed under the stretcher. When the ds are properly cleansed, dressed and minted a second hot drink is given, prefstams of sodium bicarbonate, and hot water bottles are placed about the patient. A: the advanced dressing station he is again warmed without being moved from the ther and any necessary treatment is sed out. Fresh hot water bottles are ded and he is removed to the clearing in the property of the p

Around the World and Back Again

How To Be Nice to A "Carry On" Map of Suffrage Bluejackets Ashore N the course of an article on "Lib-



-From The Woman Citizen

Industrial China

N "The National Marine" appear the following interesting statistics:

"In China there are 6,435 miles of railway open to traffic; 2,349 miles are foreign owned and controlled; 3,680 are state owned, and 406 miles are owned by private companies; 1,629 miles of road are under construction, and loans are negotiated but work is not yet commenced on 7,425 more miles.

"There are 25,000 factories that employ 400,000 men and 150,000 women. These factories are nearly all on the scaboard and do not include some hundreds of thou-sands of little home workshops that produce most of the materials for home consumption. firms in the production of egg albumen for sion of cooperative delivery systems

export; 19 breweries; 12 canning plants. 15 cement and brick and tile factories, 10 clothing mills, 112 clothing spinning and weaving mills, 9 distilleries, 39 dock yards, electric light and power plants, 57 flour mills, 24 glass and porcelain works, 42 vegetable oil mills, 18 paper mills, 56 printing and lithographing plants, 20 sawmills, 28 silk filatures, 12 smelting works, 70 soap and candle works, 10 tea factories and 28 tobacco factories."

Co-operative Delivery

WRITER in World's Work"

"The removal of a million and a half men tion. There are thirty factories where are fifteen from industry for service in the army and navy has been responsible for a vast exten-

throughout the farming sections of the West and in the smaller, and some of the larger, cities throughout the country. Here again the motor truck is used almost exclusively. Up to a recent time there were cooperative delivery systems in forty-seven cities of twenty states of the Union. One package delivery company in Boston handles between 7,500 and 10,000 packages a day, using about forty motor trucks for only, using about they may be this purpose. Two large department stores in New York-Lord & Taylor and James McCreery & Co.—pool their deliveries in a separate delivery concern. The importance of cooperative deliveries in these days of war economy may be seen in the experionce of Ottawa, in Kansas, a town of 7,700 population, which recently reduced the number of delivery trucks used by the merchants of the town from thirty-four to nine, and effected savings of from 25 to 70 per cent of their former delivery ex-

penses. In another city of 12,000 population, the number of trucks was reduced from twenty to fourteen. One grocer in a town of 4,000 population has in this way effected a saving of 50 per cent, cutting his yearly delivery expense from \$1,638 to

The Wireless as a Trade The Church Is Fighting for Its Weapon

66 N the reconstruction period following the war the nations possessing 66 THE war is not alone a military the best systems of rapid electrical communication with distant possessions or advantage in their commerce and na- cle." tional development," declares a writer in "The Americas." The article continues:

"On the other hand, to boycott a nation by curtailing its electrical communications would mean placing an almost insurmountable obstacle in the way of its foreign trade. For instance, present day foreign exchange is dependent very largely on the use of the cable. It is through cable quotations that the prices of commodities on the world's markets are settled. Whereas a dispatch sent by regular mail from the United States or Europe to South America requires normally the best part of twenty days, a cable or wireless message requires but twenty minutes for delivery.

"If the reconstruction after the war is

along clearly cut national or imperial lines, the possession of strategic stations for cables or wireless apparatus will rank in importance with the possession of coaling stations. As in the case of coaling stations, the foremost nation to-day in the ownership of these islands and ports serving as cable or wireless relay points is England. English capital also controls the majority of the great international trunk lines of cable, having built up a worldwide system during the sixty or more years since the first international submarine cable was laid. On the other hand, wire-less telegraphy is of such recent development that world systems have not yet been completed. England, however, just before the war, had actually under way a plan for an imperial wireless scheme to link up the different parts of the British Empire. Germany early recognized the importance of a cable system independent of British control to unite the scattered German colonies with the mother country, and after twenty years of effort had at the beginning of the war almost succeeded in creating such a system. By the conquest of the German colonies England has now undone this work. France was also striving during the years before the war to connect her colonies with herself by means of French cables, but several gaps still remain in the French system. The United States ranked second only to England in the possession of international cables

God and the Devil

battle, but a moral and religious battle as well," says an distant markets will have a very great editorial in "The San Francisco Chroni-

> "These Prussian standards of conscience less materialism, brutality and immorality are the most revolting to the human conscience that have ever appeared among men. "They must be trampled and destroyed in

> their ignominy, and those who profess them must be disgraced and undone for the sake of the world. "If Prussianism should triumph in this ar, then Christian standards are undone. If the Hun prevails the Church is smitten

"Therefore, the Church is fighting for its life—the Catholic Church, the Presbyterian Church, the Baptist, the Methodist, the Episcopalian and the Jewish churches—are all in a life and death struggle, which hangs upon the discomfiture of Germany.

Getting Away From the "Mere Semblance"

So WELL is this situation being appreciated by religious leaders of all denominations that the Protestant Episcopal Bishop of Utah was called upon to explain his pacifism here before his spiritual peers last week, whose attitude was well expressed in his Easter address by the Rt. Rev. James De Wolf Perry, jr., Bishop of Rhode Island:

"In a hundred military camps and naval stations, on vessels of war and on the bat tlefield, the sleeping powers of a host of men have wakened to new life. The discipline that gives a man control of all his members; the re-creation of his physical and moral fibre; the response of a man's whole being to the call of service—this is a return to life from the mere semblance o

"Still more apparent have the same forces been at work to vitalize the dormant spirit of a people. Human energies hitherto unknown have been set free; hidden resources without measure have been poured forth; households, communities, whole populations have risen from a living death with heart.

"Meanwhile, there is working through all the changing order a spiritual force as si lent and invisible, yet inevitable as the return of spring. Beyond every other of God's mighty works is the rebirth of a people's soul. Only have the first signs of it appeared, reflected here and there on faces transfigured by suffering: voiced by the par-ent of one fallen soldier: 'I would not by a single selfish regret tarnish the splendor of his honor, or again echoed in a letter from the front, 'The only enemies of Christianity are in the rear.' The army and navy have become schools in vigorous and elemental religion which will ere long rekindle the faith of markind. the faith of mankind

"Central in this faith is a new conviction of eternal life. While multitudes of mer are carrying on their cause across the line of death, the earth that they have helped redeem vibrates with the measured trend of their unseen hosts. The cries of battle caught up by their song of triumph. Death is swallowed up in victory. The voice of the risen Christ is heard as the shout of a King among them."

Victory? What Christians Have Petitioned For for Centuries THE largest of the Evangelical churches has been so thoroughly imbued with the militant spirit of the day that it is not surprising to find the same note sounded in the "First Methodist," a

little church paper of Wichita, Kan., in

an article by Mrs. Henry J. Allen: "To me this is a holy war, and our vic tory will be the victory for all that Christians have prayed for during the long centuries of struggle and suffering that have

made the civilized world what it is.
"When we entered the war it was for the then we entered the war it was for the preservation of ideals and establishing of the brotherhood of man. All our institutions are founded upon this creed, and this is the essence of the teachings of Jesus.

"Victory for Germany would defeat the ideals which we have held dear; but with victory for America and the Allies never the content of the cont

victory for America and the Allies, paganism will be crushed and never more can nations become engaged in a reign of terror and slaughter, such as has been brought on by the autocratic German creed that 'might makes right."

The Nation's Cross

MY LENT is over now, 'tis past and

My Easter with its risen Christ is come; But, O my country! when will pass thy Not till unnumbered precious lives are

Not till thou know'st the heart's Geth-

semane, Not till on bended knee, in agony,

My country finds her God. At His great trumpet call, at His behest,

My country gives her sons in Freedom's quest, The sacrifice supreme. They know the

Cross; We, standing by, will reckon not the loss, The heartbreak, and the pang, but only

God will send soon the world's great

Easter Day. -Sarah S. Pratt in The Living Church.

Hell's Livery

T IS a travesty on the Christian religion for one to claim to be an heir of God while living an heir of Satan. What right has one to say he is on his way to heaven while travelling in the livery of hell? It may be true that a man on earth can travel East and reach the West, but a man can't travel the hellroad and reach heaven at the end .- The Western Recorder.

the Great Workshop of Science

Shovelling Poisonous Gas the nectar and pollen carried by these bees,—Popular Science Monthly. submarine vessels, says a writer in "The Electrical Experimenter," that they are pose as the microphone of a telephone. Out of Trenches

erty Breaking" in "Our Navy"

"If anybody wants to help the bluejacket

bluejacket. Let him fix up a place where

they leave the ship on furlough. And a

fellow does not want to arrive home look-

ing as if he had helped the poor train fire-man out. Then let him know where he

can get shaved up without being told his hair is thin, full of dust or falling out

After his bath and shave watch him smile and reach down in his overshirt for his

"The facilities offered by the railroads

are good as far as they go, but your real, honest-to-goodness saltwater sailor wants gangway when he takes a wash. And he

vants a WASH. Not a canary bird's bath.

He does not wet the tip of his fingers and gently touch his eyes. He sloughs into a bucket of water and WASHES.

"If you see a bluejacket travelling alone

or even a couple of other fellows, why just say to him, 'Will you join me in a cup of Java, young man?' and you will be surprised how he will start to become human and tell you all about it. You will also

be pleased to note how many bluejackets desire coffee instead of liquor. If you know any one in the navy, ask the bluejacket if

he ever ran across such a man; maybe he did. I once left a fellow in Shanghai, China, and met his father when I was on a train

in Ohio. And maybe the father was not

pleased when I gave him good news of his

sailor man, don't refer to him or other navy

men as 'Jackies' (all the samee monkeys), but say 'men,' 'sailors,' 'bluejackets' or 'you fellows.' Don't ask him why his trousers are so wide at the bottom—he does not know. All he knows is they cost him twice as much now, as they did nine months ago."

as much now as they did nine months ago."

only boy. In your conversation with the

lowing practical suggestions:

John D. Whitecar offers the fol-

a man can clean

up after a night's ride on a train. At

present if he de-

he must engage a room at the near-

est hotel, paying for a full day's use

of the room. This amounts to a con-siderable item

when a fellow draws but \$30 a

of blue jackets

come from inland

states, it usually

means a long train ride when

"As the majority

ires to clean up

WEIGHING considerably more than the atmosph than the atmosphere, the poisonous gases employed in modern warfare always seek lower levels. Thus the gas clouds penetrate trenches and deep dugouts, and in most cases it is a matter of many hours before they become sufficiently diluted with the atmosphere to permit of safe breathing. So the matter resolves itself into a problem of driving the poisonous fumes out of the trenches and underground shelters, or at least thinning them out until the air is again made safe.

For this reason, says "The Scientific American," American soldiers now in France literally "shovel" poisonous fumes out of their trenches. Attached to a shovel is a sort of canvas scoop or "flapper" which permits the men to heave the heavy gases over the parapets and to beat the fumes and dissipate them in the surrounding air.

A New Alibi for Dispatchers.

NO MORE will a railroad dispatcher need to seek an alibi if an order he gives miscarries, resulting in a wreck. According to "Popular Mechanics," the dispatcher for an electric railway in Missouri uses a dictaphone in connection with his work. With the mouthpiece of a dictaphone attached to the telephone transmitter the dispatcher is able to record his instruction by telephone to conductors at various points along the line.

"Lifting the receiver from the hook starts the dictaphone cylinder rotating. The records made in this way are dated and preserved for a time so that they may be referred to in case any dispute arises as to the character of the orders

If You Don't Smell All Right in a Beehive You're Kicked Out

A LL bees smell alike to average mortals, but Dr. N. E. McIndoo, whose book "Recognition Among Insects" has recently been published by the Smithsonian Institution, has trained his nose until he can recognize the three castes of bees - queens, drones and workersmerely by smelling them. He can also distinguish several other odors peculiar to bees and their hives. His experiments show that the bees themselves recognize one another by individual odors, and use the sense of smell for as many purposes as human beings use their eyes and ears. Worker bees returning to the hives from the field pass the guard unmolested, because they carry the proper sign, although the hive odor they carry is fainter than when they left the hive, and it is also partially masked by the odors from

Microphones

ENGLISH experts have so improved

able to steer accurately and automatical- By listening to the beat of the subma-·ly down on the submarine, while former- rine's propeller the crew can determine ly they were unable to locate a vessel be- the exact location of the enemy and atneath the surface. The microphones are tack him before he has the slightest idea the use of the microphone on anti- placed below the water close to the keel of what is happening.

"Hercules"



This great derrick, called "Hercules," is here seen lifting a steel mast at the plant of the Newport News Shipbuilding and Dry Dock Company. It is said to be one of the largest electricallyoperated revolving derricks in the world. The photograph, with others of a similar nature, appeared in "The National Marine."

Catching Aviators by Electricity

"MORE frightfulness," comments the editor of "The London Aeroplane," in citing the following:

"The frontier correspondent of the 'Telegraaf,' of Amsterdam, reports on February 27 that the Germans at Zeebrugge have adopted a new method for catching hostile aviators. Toward evening they send up twenty captive balloons, without crews and attached to electrified steel cables. electric barrier thus created is claimed to constitute a great danger to all aviators coming into contact with it. [What a won-derfully imitative person is the Ger-

The Germans, it is asserted, have also manufactured a new and improved type of aeroplane, fitted with three propellers, one being so arranged that it can keep the aero-plane for some time stationary above a certain point, thus permitting the thrower to aim with greater accuracy. [Every perpetrator of crazy aeronautical ideas has invented this for the last nine years. Probably the yarn originated from some one seeing a three or four engined Riesenflugzeug.—Ed.]

The Narrow Gauge Behind the Lines

A LTHOUGH motor trucks and fine roadways played an important part in the successful French defence of Verdun, it must not be inferred that railways are not first in the problem of transportation just back of front lines.

Such is the case, according to Robert K. Tomlin, writing in "The Engineering News-Record." It was soon found that the number of motor trucks necessary to supply the front lines wore down the roads so rapidly that the greater part of the motor trucks were soon required to repair their own damage to the roads!

Hence the light gasolene locomotive is used on light railways near the front instead of steam locomotives, because it is more nearly noiseless.

Away With the Axe THE day of the woodsman with the

I big axe will soon be over, judging from a new tree-felling machine described in "The Scientific American."

The new machine, a German invention, is run by a small motor. It will cut through a trunk thirty inches in diameter



in a couple of minutes. The saw is a chain affair with links of six teeth each, which are readily exchanged. It runs in a frame over four rollers with ball bearings. Its hollow handle is designed as a reservoir for oil.