



# MOBILE

## DANGER FOUND IN GASES AND DUST OF AUTOS.

The direct killing by automobile, extraordinarily prevalent as it is, represents only a small part of the damage done by motor cars. The statistics record only those deaths directly due to automobile accidents.

There are many other deaths caused in an indirect manner. Two problems of public health caused by the increasing use of automobiles are beginning to attract attention among public health associations. One relates to the damage caused to public health, particularly that of women and children, by the city dust; and the other to the destructiveness of the exhaust gases emitted from automobile cylinders.

### AIRBORNE INCREASE DUST.

Increased automobile traffic means increased dust, and this in turn results in much injury to public health. Dust is a germ carrier. Look in the sunlight at the light, dancing particles of fine dust which are called "sunbeam notes," and notice that every particle is heavily discharged with a multitude of disease germs seeking lodgment in a host, and an idea may be formed of another menace caused by the automobile.

The dust notes represent the finest particles of air-borne dust. But there are heavier and more destructive forms of dust carried in the air and by the wind along the city's streets. The coarser dust consists of particles of paper, rag, wood, asphalt, iron, brass, copper, sand, fibres of plants, rope, twine, hair, lime, plaster, ashes, stone, micro-organisms and germs.

### MEASURE FROM DISEASE.

Consumption is one of the most common causes of death. Many people suffer from it. They expectorate freely and the germs of the disease settle on dust and are carried about in the air by the wind. Living, virulent tubercle bacilli have been times and again found in the dust lodged high up in the rooms of hotels, restaurants, hospital wards, in street cars, railroad cars, automobiles and similar places. Drying does not kill their potency.

Here is a new problem for health authorities to study: "What percentage of modern cases of tuberculosis is traceable directly and indirectly to the dust caused in city streets by increased automobile traffic?" It is known that dust is an irritant and as a germ

carrier is responsible for much injury to the public health, but the increased city dust caused to automobile traffic is promoting new health dangers worthy of serious study and statistical recording.

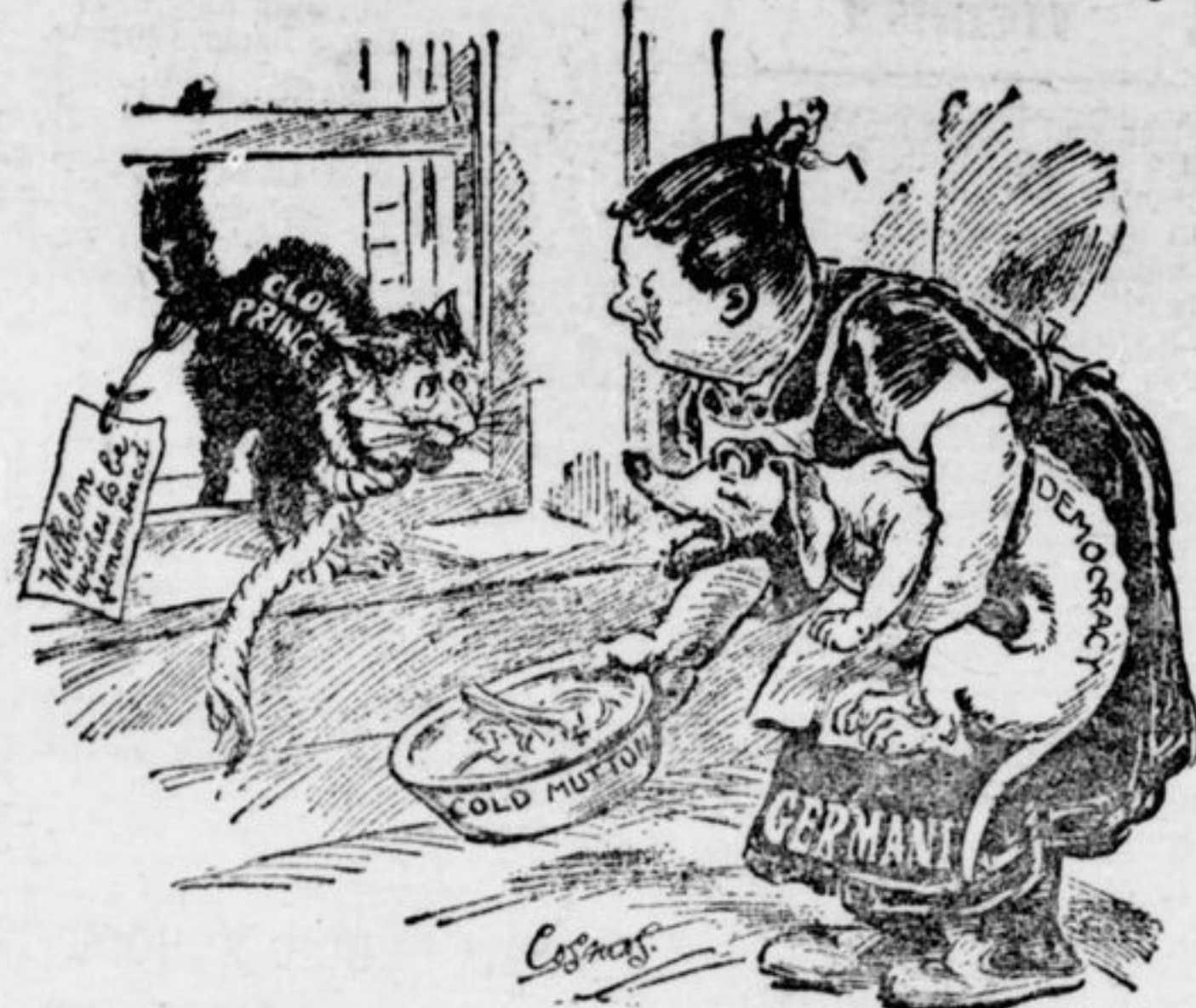
The dust formed by automobiles differs from other dust because of the large number of metallic particles it contains and the oil and other waste products it carries. The automobile wheels grind up iron and brass bolts and other metallic articles into fine powder which mixes with the street dust. These metals and the oil carry many by-products of the exhaust gases from the cylinders. Included in these products are carbon monoxide, metals, sulphides, sulphates and many hydro-carbon poisons. These, besides irritating the mucous membranes, appear directly to poison the human system and bring on many psychic traumas or strains.

It has been demonstrated that fatigue may be caused by substances carrying hydrogen ions such as carbon dioxide or potassium dihydrogen phosphate, by phenol and similar chemicals, carbonic and sulphuric acids and salts. Automobile exhausts, and the oils, greases and other matter discharged by them into the streets may carry some or all of these fatigue-causing substances and many others. These constitute a new danger to city life and are a prolific source of sickness.

### EXHAUST GASES CARRY POISONS.

The exhaust gases from automobiles carry many poisons. Carbon monoxide and carbon dioxide are the commonest. There are, however, many poisonous hydrocarbon acids and salts carried out by them which have not been studied. These poisonous gases do not often get into the system in sufficient quantities to cause death or direct sickness, but the cumulative effects of inhaling even minute quantities result in a serious undermining of the public health. Many of the headaches and neuralgic pains people who use the city streets much suffer from are some of the effects of the inhaling of automobile exhaust gases.

The effects of exhaust gases inhaled in buildings such as garages may be serious. The oxygen of the air is absorbed and carbon monoxide takes its place. This may cause instant death as statistics show.



## THE CAT CAME BACK—AND GOT THE COLD SHOULDER

The return of the "Clown Prince" to Germany has failed to make any impression on the political life of Germany.

—From the News of the World.

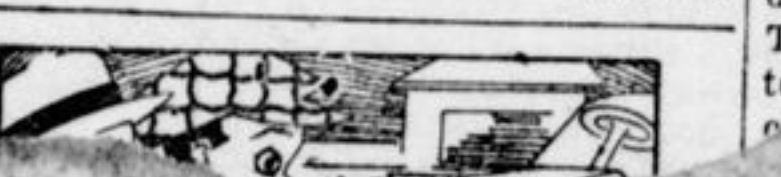
## The Fascination of Russia.

"What is the inscrutable power that lies hidden in you? Why does your aching, melancholy song echo forever in my ears? Russia, what do you want of me? What is there between you and me?" The passage is from one of Gogol's books, written while he was in exile, pondering the secret of the fascination that his native land held for him.

Not only Russians in exile but also foreigners who have lived in Russia have felt the strange spell of the country. What is the reason for it? I have often, says Maj. Maurice Baring in the Puppet Show of Memory, found myself asking that question.

The country has little obvious glamour or attraction, and the picturesque peculiar to countries rich in historical traditions is absent in Russia; often obscure, and for that reason it is the more striking. The realization came home to me strongly in the summer of 1913. I was staying in a small wooden house in central Russia not far from a railway, but isolated from other houses and a fair distance from any village. The harvest was nearly done. The heat was sweltering; the country was parched and dry; and the walls and ceilings were black with flies.

Just at the cool of the evening there



## WHERE HONESTY IS A CRIME

### The World's Most Remarkable Rogues—By St. Nihal Singh

The oddest job, possibly, assigned to any official in India or elsewhere is held by a British official, Mr. H. W. Starte, who has been appointed the official father-confessor to a number of tribes which take to crime as a duckling to water.

Among these "criminal" tribes in India, crime descends from father to son and is literally a hereditary profession. Crime among them is regulated according to caste. One group specializes in cattlelifting, another in counterfeiting, and so on.

That sort of thing has happened for so many centuries that the moral instinct has been practically killed in these people. For a member of a caste which specializes in thieving to decline to engage in it would be regarded as an act of backsliding on his part for which he would be outcast. In short, it would constitute a social crime for one of them to lead an honest life!

Children as Scouts. The training of children of the criminal tribes begins almost as soon as they start to take note of their surroundings; I was told by a high police officer who had been intimately associated with these tribes that the parents show a coin, secrete it, and then ask the child where it is. As their intention is to make the child say it has no knowledge of the whereabouts of the money, it is coaxed and beaten by turns until it is able to lie without betraying it in any way. After that lesson has been mastered, the child is taken to villages and made to act as a scout for older criminals, and still later is taught the rudiments of committing crime in which he is to specialize.

Girls are trained to act as guides and helpers only, the actual commission of crime being left to the men, aided by boys. On the pretext of selling vegetables, fruit, and gewgaws, they manage to secure access to houses. So retentive does their mem-

ory become that they are able to go back and give an exact plan of the house, showing how best to secure the valuables and get away.

On being asked to take on the job of looking after these criminal tribes, which wander from place to place, making it difficult for the police to track them and bring home to them the crimes they had committed, Mr. Starte spent some time in studying their language, ways, and psychology. With great difficulty he succeeded in gaining the confidence of some of them, and by degrees showed them how much happier they would be if they would settle down and pursue an honest calling instead of living in fear of the police.

To tame these tribes and to teach them civilized habits and trades a number of settlements have been established in various towns of the Bombay Presidency. Mr. Starte, who initiated the experiment, is in charge of them all.

On visiting the settlement at Bijapur I found that each principal tribe lived by itself. Thieves, robbers, burglars, counterfeiters, and cattle thieves had each their own little colony. They quickly learn to be skilled workers, particularly the counterfeiters, and, after a short period of training, become good blacksmiths, carpenters, masons and domestic servants.

### A Colony of Counterfeiters.

While visiting the counterfeiters' colony my attention was attracted to a little booth containing an image clad in gaudy clothes and garlanded with roses, jasmine, and marigolds. The officer conducting me told me that this was the particular god of the counterfeiters, and they always worshipped and promised it a share of the proceeds of their crime before actually committing it. The god remained the instant to worship it, but the penalty to commit crime was not commuted out of the people.

thought and to call up pictures of rites, ritual and custom, of rustic worship and rural festival, of pagan ceremonies older than the gods.

## The Man Who Fell Six Miles.

Probably the most astounding experience in the whole history of the United States air service belongs to Maj. R. W. Schroeder, "the man who fell six miles." Equipped with a super-charger for his engine, so that it would run at high altitudes, and with an electric heating apparatus and a tank of oxygen for himself, he started out one day from McCook Field, Ohio, to climb to a height of forty thousand feet, or almost eight miles. His plane, says Mr. David Masters in the Wide World Magazine, climbed beautifully, but when he reached thirty-five thousand feet he began to feel queer; the oxygen had ceased to flow.

He fumbled for the stopcock to make sure that it was wide open; he could not see well because there was a sheet of ice over his goggles both inside and out. Then he began to struggle to get his breath. Without thinking, he lifted his goggles to see what was wrong with the tank. Instantly a most appalling explosion seemed to take place inside his head, and everything went black. For the life of him he could not think what had happened. He tried to open his eyes, but to his horror found that he could not.

What had happened was this: the temperature had dropped to sixty-seven degrees below zero, and as soon as Schroeder lifted his goggles his eyes, suddenly coming into contact with the cold air, froze solid!

Blind and dazed, the unfortunate aviator could no longer control the plane. There came a tremendous rush of air, and the wind began to screech past as he drifted into unconsciousness. Down and down plunged the machine. One petrol tank slipped loose, owing to the sudden jolt, and the pressure of the air smashed the tank against the fuselage.

He fell for a distance of six miles, and was rescued by a search party.

## Nitchener's Romance.

It was customary to speak of Lord

palace where he lived in the house of