

TROTting WONDERS.

THE PNEUMATIC SULKIES MAKE MARVELOUS TIME POSSIBLE.

Brilliant Performances of Nancy Hanks and Sunol—Advantages of the Air-Cushioned Wheel—The Speed Limit.



AUD S., Sunol and Nancy Hanks—which of them is the fastest?

Should you ask this question of a certain ruddy, pleasant faced, brisk-mannered Scotch-Irish New Yorker, you would receive for answer an emphatic:

"Maud!" Well may Robert Bonner give this opinion and cling with enthusiastic loyalty to his favorite, that magnificent

this. He held up the shafts of a pneumatic and told his boy to press a forefinger against the flat. With even that slight pressure the vehicle quickly moved backward. Later on Marvin had the sulky lifted so that one wheel was free from the ground; he then started the wheel whirling and it spun until I began to think perpetual motion had been found at last. It is easily appreciated that such a factor as that must help a horse to finish with comparative ease, for strength is saved—the strength which used to be employed in overcoming the greater friction of the cone bearings.

"Moreover, the new sulky takes the turns without sliding, which of itself is a big advantage.

"There is also much less spoke vibration in the new sulky than there was in the old. Should you ride behind a trotter in a steel tired sulky you would at once notice a jarring caused by the wind whistling through the spokes. But in the pneumatic the friction between the wheel and the track surface is greatly modified by the soft rubber tire, and there is little vibration among

turns with almost or quite the same facility with which it takes the stretches, will nearly eliminate the superiority of the kite track as regards turns.

The matter of the actual difference in time between a pneumatic tired and a steel tired sulky is one about which horsemen disagree. Enthusiasts claim as much as three or four seconds; conservatives, a very few of them, will allow one second or thereabouts. But, according to the best judgment, based on careful study, the difference may be said to be from two to three seconds. In bicycling the difference is much greater than four seconds; but in that sport the racer was raked much more by the old wheel than was the trotter by the old sulky.

Mr. Bonner is occupying himself with studying ideas in connection with the "bicycle sulky." One gentleman has submitted to him a design for a cushion tired sulky, but of this he disapproves, regarding it as lacking in elasticity. Another theorist advocates stretching a fine silk screen from rim to rim to do away with that spoke vibration caused by air friction. This, Mr. Bonner thinks, would be valuable in some parts of the track, but on others the silk would act as a sail. Finally, the owner of Sunol is holding back to ascertain whether larger wheels would not be better than the twenty-eight and thirty-two inch sizes.—New York Press.

Dogs of War.

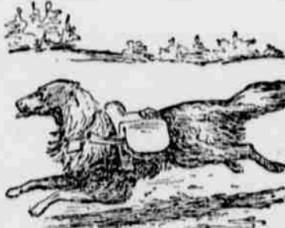
For the past year numerous tests and experiments have been made in Germany with the Scotch collie dogs for military purposes, especially during times of war, and it has been found that this dog is the best and most available among the various breeds of dogs, and from now on, according to the St. Louis Post-Dispatch, trained collies will be added to the standing armies of Germany and France. The services to which the Scotch collies will be trained are numerous. They will serve as messengers for carrying dispatches and important communications to those army divisions stationed in the immediate vicinity of the enemy. During the progress of a fight where the troops happen to be scattered over a vast



HUNTING UP WOUNDED.

area of territory, they will be used for carrying ammunition to the various divisions. They are furthermore trained for reconnoitering and for hunting up the wounded and carrying them on ambulances, especially constructed for that purpose, to the field hospital. For the latter purposes these dogs are almost invaluable.

For reconnoitering purposes the dogs are trained to run ahead of a division of soldiers, search the territory closely and announce suspicious circumstances by standing still in their tracks. Another field for his activity is outpost duty. In this case the dog is trained to scent the



AS A MESSENGER.

approach of strangers and to return at once to his master to announce this fact to him. All this must be done very quietly, of course, so as not to disturb the enemy.

When doing duty as a messenger the dog wears a collar around his neck to which a leather pouch is attached, in which the dispatches are concealed. The collar is numbered and bears also the name of the army division to which the dog is detailed. In war times this name can be affixed in cipher so that the enemy may not be any the wiser as to the location of the division in question, to which the dog belongs, should the dispatch fall into his hands.

Some of the best and strongest dogs are detailed to the red cross division of the army, where they do valuable service in hunting up the wounded in timbered and valley regions, where they are likely to escape the eye of man, especially after dark. When the dog discovers a wounded soldier he places his two fore paws on the body of the man and barks until assistance arrives. With this is combined the ambulance service. Small but well built wagons, which can carry two men, are easily drawn by a good strong collie. These ambulances are low, have good springs and the tires are covered with rubber. One of these wagons, with two attendants and a dog, can do twice as much field work as has heretofore been done by two red cross men with a litter. This has been demonstrated during the spring maneuvers.

A chimney pie: carved from wood over 6000 years old has recently been erected in a house in Edinburgh. The wood, an oak tree, was found in a sand pit at Musselburg, thirteen feet below the surface.

A broken wooden horse, with which Napoleon Bonaparte played when a child, was recently sold for \$300.

CHOLERA'S HOME.

THE FETTERED STALKER OF BAKU FROM THE ORIENT.

It Has Swept Over Europe From Baku, Russia's Petroleum Centre—Ignorant Peasants Hapel the Physicians.



NCE more from Turkestan stalks Europeward through the vast country of the czar the menacing specter of the cholera. The fact that upon this occasion it comes via Asia suggests a reversion to its more ancient itinerary, when it almost invariably advanced upon Europe from that direction. In later years the tendency of the disease has been to spread its ravages first through Europe and the Red Sea, thence northward.



LEAVING THEIR OLD HOMES.

As invariably happens in similar cases the air is thick with conflicting rumors and opposing theories as to the origin and first location of the contagion. The most reliable version, I think, is that which traces it to Turbeti-Sheik-Djami, a place of minor importance on the Afghan-Persian frontier. Here it became unmistakable about the beginning of May, thence spreading to Meshed. This town is on the road connecting Kandahar, Herat and Askabad, and is the most important place in the northeastern part of Persia. The deaths here quickly reached an alarming high



RUSSIAN PEASANTS REPELLING THE HEALTH OFFICERS.

average, and it was not unusual for 120 cases to be registered in one day. Next the cholera was heard of in Askabad about June 1st. The latter town is on Transcaspian Railway, and the plague continued to follow the line of this road in both easterly and western directions, its western halting place being for a time at Uzun-Ada, from whence the tide of emigration subsequently carried it still further west across the Caspian Sea to Baku, the eastern terminus of the Transcaucasian Railroad.

Baku is a city offering peculiarly favorable conditions for disease to take root and establish itself as a permanent danger to surrounding localities. Being



FUGITIVES FROM THE CHOLERA.

a railroad center, it is in constant communication with the outer world, and its further importance as the headquarters of the great petroleum industry gives it a population of nomadic workmen, few of whom may be characterized as fanatical devotees of cleanliness. They herd together in promiscuous crowds, disregarding ordinary hygienic precautions and necessarily suffering the consequences. Want of proper sanitary supervision on the part of the local authorities is moreover an old and well-founded grievance in all parts of the Russian Empire. Nowhere is the charge

more justly preferred than in the case of Baku, where general filth, in and out of doors, reigns supreme. There is no adequate inspection of household dwellings, and it is customary for refuse to be



A STREET SCENE IN BAKU.

thrown into the streets and for the dead bodies of animals to strow the pavement unheeded for days at a time. Whoever goes into an ordinary workman's dwelling is confronted by a series of sights and smells which at once tell the tale of inexcusable neglect—floors that are never scrubbed from one year's end to the other; furniture as greased and polished from constant contact with unwashed humanity and unfumigated clothing that its regeneration seems impossible; corners of rooms into which rubbish of all kinds has been thrown, and left to accumulate indefinitely; and altogether a state of affairs specially adapted for the breeding of disease.

Along the highways of the town things are scarcely better, perhaps with the single exception that they exist in the open air instead of in the close, confined atmosphere of the interiors. The Baku street cleaning department would receive but slight commendation should its operations be extended to America, or, to reverse the proposition, if the uniformed gangs of street cleaners which are now familiar sights in New York were to appear on the streets of Baku, broom in hand, they would create something resembling a panic. I am not quite sure that their appearance would not galvanize the bodies of horses, mules, cats and dogs which indiscriminately litter the pavements into restored life under the impulse of sheer astonishment. In Baku, in fact, when municipal vigilance becomes aroused to the point of considering the disposal of a carcass which has been encumbering the highway several days, one or two municipal employes stand passively on the opposite sidewalk and mutely survey the task before them for an hour or more before bracing

An outbreak of cholera in Russia is a momentous occurrence in more ways than one, because it is liable to cause a suspension of industries which employ large numbers of persons, thus creating a condition of general distress. In Baku the city authorities actually cleared out, under the impulse of fear, and employers of labor closed up their factories. The position of the people can be thus easily imagined, deprived at once of the official supervision upon which they perpetually depend and of the very means of subsistence. When the Russian ruralist finds himself thus placed his first tendency is to lose hope and become generally demoralized. He is then harder to manage than ever, and, as I have shown, turns into a fanatic and a rioter.—Once A Week.

South American Savages at the World's Fair.

The Jibaras is a wild, untamed savage who enjoys himself by wandering in picturesque dress over certain sections of South America, and twelve members of this hitherto almost unknown tribe will relinquish the pleasure of southern festivities to engage in the grand crusade for education which will mark Chicago as its own during the coming year. The Jibaras will educate visitors, acting in the capacity of an object lesson, and at the same time will probably return to their homes with one or two new ideas in regard to architecture and morals.

This tribe of savages roam in the most primitive condition over the plains of Ecuador bordering on Brazil. They are an unpleasantly fierce lot and have many curious and playful little ways, among which is the custom of preserving their enemies' heads as ornaments. For this purpose the head is prepared in a peculiar manner so as to leave it finally of a very small size, although preserving all the features. This lovely ornament is then further adorned by streaks of red

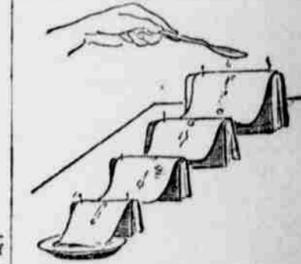


THE NATIVE COSTUME.

paint, and is then calculated to make its owner an object of envy to all of his companions. The tribe is especially skilled in leather work of various kinds. The members of the tribe are migratory, wandering here and there, and having no form of government.—Washington Star.

Little Drops of Water.

Take a long strip of stout paper and pass it over the top of a smoky lamp, or (if you can't endure the disagreeable odor of the lamp) besmear it completely with plumbago on one side of the paper's surface. Place several large books in regular order of decreasing size on a table and drape the strip of smoked paper over them with pins, as per illustration, the end of the strip resting in a plate. The undulations of the strip should be more accentuated the nearer you get to the smallest book. Now let drops of water fall on the prepared paper, and they will roll along it, "up hill and down," in a most surprising manner.—St. Louis Republic.



THE TRAVELING DROPS OF WATER.

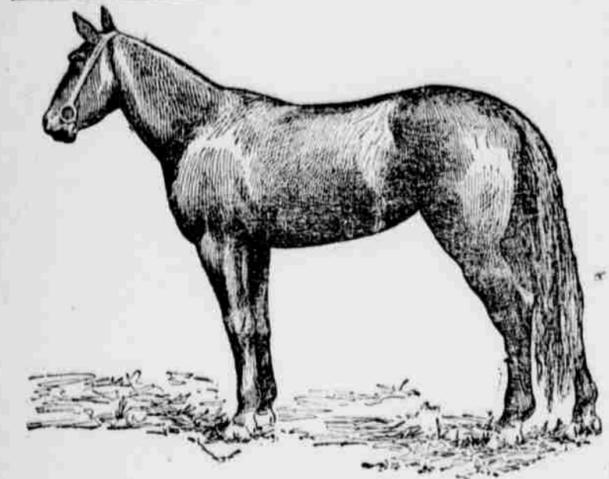
Cause and Effect.



Wille—"Do you keep that sour cow yet?"
Milkman—"What sour cow?"
Wille—"The one that gives the sour milk."—Truth.

The Italians have guns weighing one hundred tons on their battle ships. They are found too big and are to be taken out.

The great cantilever bridge at Niagara Falls is entirely composed of steel. It is 810 feet in length, weighs 3000 tons and cost \$900,000.



NANCY HANKS.

mare whose record of 2:08 1/4 on a regulation oval track seven years ago is in the minds of most impartial judges the best trotting performance the world has ever witnessed. Sunol's 2:08 1/4, made over the time-destroying, mathematically-ingenious, kite-shaped track, is inferior as regards absolute speed, Mr. Bonner claims, to Maud S.'s time, inasmuch as the kite track is undoubtedly from two to three seconds faster than the oval. Nancy Hanks's 2:07 1/4, though made on an oval, he asserts is also inferior, because Mr. Forbes's game little Kentucky six-year-old dragged one of the wide-tired, air-greased, jarless, pneumatic sulkies just coming into vogue. This fact made her time, he contends, at least two seconds faster than it otherwise would have been.

Maud S. having had neither the kite track nor the "bicycle" sulky to assist her, and, furthermore, trotting her 2:08 1/4 back in 1885 on a track poorly planned as compared with those of today, may be judged to have made the equivalent of 2:14 had she been assisted by all three of these aids. Consequently Mr. Bonner is emphatic in his conviction that she is queen of the turf, though she may have been technically dethroned.

In talking about Maud S. and her younger rivals Mr. Bonner made a prediction of great interest to lovers of the trotting horse. "I think," said he, "that the time limit for trotters has nearly been reached. I place it at 2:05."

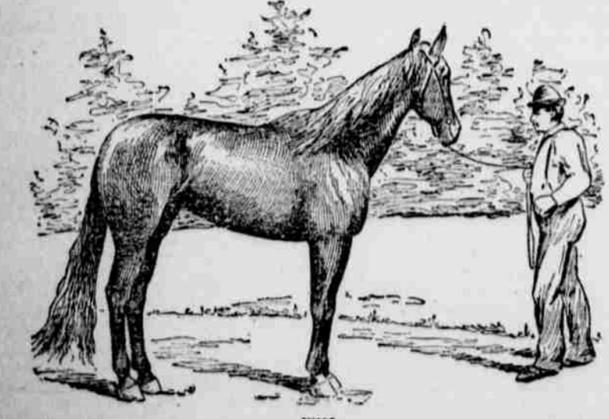
The great little champion of the trotting turf, the peerless Nancy Hanks, has added new honors to the fullness of her fame. On the kite shaped track at Independence, Iowa, piloted by that prince of drivers, Budd Doble, she trotted from wire to wire without a break or falter in the sensational time of 2:05 1/4. This same trotting wonder also brose

the spokes. This applies to both the turns and the straightaways, but to the latter particularly. The vibration in the old sulky was a reason for not making it lighter. It made a light sulky likely to suddenly weaken, and it also mildly martyred some drivers who developed kidney trouble from riding on the old school bone shakers. Only two years ago Otis Hickok, one of the very best drivers of his time, was obliged to go to the Hot Springs of Arkansas in consequence of a kidney affection.



THE 23 INCH WHEEL PNEUMATIC SULKY. A. A.—Position of ball bearings. B. B.—Hollow steel backbone.

"Again, consider how the old sulky cut into the track. The steel tire was only three-quarters or seven-eighths of an inch in width. The weight of the vehicle and the driver rested on two narrow unyielding strips of hard steel—that is, some 200 pounds pressed them into the track—and actually the trotter was pulling up hill during the mile; drawing 200 pounds up a grade very slight, to be sure, but certainly worth taxing into account when quarter seconds are measured. The soft cushions of the pneu-



SUNOL.

matic tires leave hardly any trace on the track. They are twice as broad as the steel tires, and if there is any pulling up hill it is too slight to be even imagined.

"The new sulky also passes over pebbles, etc., without jarring. A pebble is on the track. The steel tire hits it and an ugly jar is felt, setting the spokes to greater vibration and annoying a nervous driver. But when the pudding like surface of the pneumatic hits the pebble it instantly 'gives' to it, and the driver is literally ignorant of its presence on the track. This may seem too trivial for consideration, but horse owners know that it is not."

Mr. Bonner is of opinion that the new sulky will restore to the regulation track its former place. The oval has been judged to be plowier than the kite, because it has two comparatively sharp turns to the one and easy turn of the kite. But the new sulky, by taking the