#### The American Voice.

Why is not as much attention paid to the pleasure to be derived by way of the ear as the eye? In this country we treat the ear barbarously. The ear gets the minimum of pleasure, and it retorts by aggravating the nerves. And so it happens that much of the discomforts of our life come through the ear. What the foreigner most notices in this country, until he becomes, as we are, more or less callous to it, is "noise." We are not simply pitched on a high key nationally, but on a discordant key. It is not a gayer or more animated country than some others, but it is noisier. Certainly we do not cultivate harmony or moderation. To begin with, the "American voice" has an unenviable reputation. It is ant to be shrill, strident, high-pitched, unmodulated. This quality adds an unnecessary aggravation to social life. It disorganizes the nerves, and increases the tendency to nervous prostration—this and the other unchecked noises. The human voice ought to be a delight; it was meant to give musical pleasure.

There is no good reason why the American voice should not give pleasure. The voices of uncultivated races are often delightful. The negroes set us a good example in agreeable tones. That there is no radical incurable defect in the American voice we know, because we have had orators whose tones were as musical as the organ and the flute; there are communities where we hear for the most part modulated, low, and pleasing speech; and it is getting to be admitted that an American singer is the peer of any in the world. But in general no care is taken about the voice in speech. Girls as well as boys are permitted to make home discordant and school a babel of mere noise by the most vulgar and rasping use of the vocal organs. Mrs. Browning might have written, with us in view, a more pathetic poem on the "Cry of the Children." If children ought ever to be whipped, or, to put a case more in consonance with the tendency of the age, if children ought ever to whip their parents, the castigation should be given for the harsh, piercing, and discordant voice. It is idle to say that this sort of voice is natural to them. Any voice can be cultivated to a degree that it shall not be unpleasant, and this education should go on from infancy in every home and every school. It is a matter of public interest for the public pleasure. Think what a tea party might be!

The voice is, however, only set to the pitch of the other noises. In all thickly settled communities the ears are split and outraged by the steam whistle of the factories and the locomotives. In the depths of the night the startled sleeper has the veil of seclusion torn away from him by the scream of the whistles, the invalid's excited nerves are worn to rags by the barbarous pipe of the locomotive. We skringe and suffer with only faint protest. It is only a part of the universal noise and hubbub. Most of this screaming of the steam demon is absolutely unnecessary in this day of clocks and watches and guarded railway crossings. But if we must have the whistle, why not invent one that is moderately musical instead of being a torture? This is a suggestion of quiet-loving people, who find the noise of our American life every day more intolerable. Perhaps any abatement of it would not suit the majority, who like to go tearing and whooping through the world.

It is fortunate, considering our voices, that we are not Moslems, for then we should substitute for the muezzin's melodious call to prayer a harsh summons that would frighten every sinner back into his bed, and compel him to stop his ears against the rasping invitation to devotion. But is it altogether fortunate? For have we not the church and other jangling bells? These give out noise and nerve-shaking clamor instead of melodious notes. There are few bells in the United States that are agreeable to the ear. The foundries seem to go on the idea that anything in the shape of a bell will answer the purpose, with little or no regard to its tone, and we are called to church with the same metallic anger that invites us to a fire. The manufacturers are probably indifferent because the public are indifferent. Their products are mechanical, and only by chance musical. There is the need of art in the making and ringing of a bell, as in the making and playing of a piano. We appear to be content with any mass of metal cast in the bell shape, and to let a ringer with the instinct of a blacksmith evoke its dissonance with a sledge hammer.-Charles Dudley Warner, in Harper's Magazine.

## Work in High Altitudes.

Some curious facts were brought to light on the capabilities of men to labor at high altitudes during the construction of the Peruvian Central Railroad. This highest point at the tunnel of Galeria, 15,645 feet above exceed 8,000 to 10,000 feet above sea level; but beyond this there was a sudden falling off in the work of oneeasily done by 50 at sea level.

#### A PNEUMATIC BICYCLE BRAKE.

An extremely simple and inexpensive brake, with which pressure may be immediately brought to bear on the wheel by operating a hand bulb, provision being also made for instantly releasing the pressure, is represented in the accompanying illustration. It forms the subject of a patent recently issued to Dr. Wm. B. Wallace, 144 East Sixtieth Street, New York City. A portion of its structure is out of sight in the hollow frame of the machine, its supporting plate being bolted to a flange of the steering fork, in the upper portion of which is held the usual slide tube connecting with the handle bars. To the under side of the supporting plate is hinged a plate carrying a concave shoe adapted to bear against the wheel tire, the hinge plate being normally raised by a spring, connecting it with the

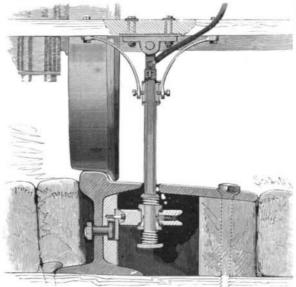


WALLACE'S PNEUMATIC BICYCLE BRAKE.

supporting plate, while between the two plates is an inflatable bag connected by a tube with a bulb which partially encircles one of the handles of the handle bar. The tube is elastic, but has a rigid section, to enable the length of the inflating tube to be adjusted to suit the height of the slide tube. The brake is applied by repeated squeezing of the bulb, producing air pressure in the bag or flexible reservoir above the plate carrying the brake shoe, the air pressure being removed and the brake released by opening an ordinary escape valve at one end of the bulb. The device may also be used as a hydraulic brake, and may be applied on vehicles other than bicycles.

# AN ELECTRIC RAILWAY CONDUIT.

In the conduit shown in the engraving one side is formed by one of the rails, and the trolley arm is so arranged that it will have the necessary flexibility and still be sure of making a positive contact with the line conductor. The improvement has been patented by Mr. Albert M. Burgher, Clay City, Ky. The opposite



BURGHER'S CONDUIT ELECTRIC RAILWAY.

side of the conduit is formed by a timber laid parallel to the rail, a guard plate being secured to the top of the timber, leaving a slot between it and the rail for the trolley arm, while a strip of wood coated with insulating paint is bolted to the web of the rail. The heads of the bolts are covered by insulating blocks, against which is secured the line wire, having a flattened face and rounded outer side. The trolley arm is pivoted at the top to have a limited lateral movement in a bracket line starts at Lima, and proceeding inland, reaches its insulated on and rigidly fastened to the truck frame, the portion of the arm lying adjacent to the conduit sea level. It is stated that men were able to do a fair top being coated with insulating material held in a "sea level" day's work as long as the altitude did not casing. On the opposite sides of the casing are recessed wear plates which receive screws in the ends of curved springs rigidly attached to the truck frame, and pressfourth to one-third up to heights of 12,000 feet, and at | ing with equal tension on opposite sides of the trolley still higher elevations 100 men were required to do work arm, holding it perpendicularly, and yet permitting the car and arm to have the necessary movement in Times.

relation to each other. The hub of the trolley wheel is held on the trolley arm between springs, to provide for the up and down movement of the car, the wheel being grooved to fit snugly on the line wire, and provided with ball bearings, while, to insure a perfect contact, it has a radial bore in which is held a copper plunger, the inner end of which is held in close contact with the hub by a spring. In front of the trolley arm is carried a guard, hung in the same way, to brush aside any possible obstruction. The improvement is designed to afford an inexpensive and efficient substitute for the present overhead trolley systems.

### The Color of Horses.

Mr. W. H. Hawkes writes to the Australasjan as follows on that vexed question, the color of horses:

"It is an old saying among horsey men, 'a good horse was never a bad color,' and yet popular prejudice assigns all sorts of good or evil traits of character to particular colors. I can quite understand this with those who do not know better; but that an expert, like an Indian buyer, should hold to the popular fallacy is almost beyond belief, seeing that we have had innumerable instances, both in the old country and here, to the contrary. It was recently that some four or five races were won in one day upon one of our local courses by chestnuts, and I think the fact was mentioned by one of your contributors, and they are equally good either in saddle or harness. Yet there are numbers who will condemn a chestnut at once for his color only, be he ever so perfect in every other respect. The objection to a gray one can understand from a groom's point of view, seeing that they are so difficult to keep free from stains as age whitens their coats, but for no lack of good constitution or disposition.

"Some will tell you that a roan is the hardiest of all horses, and yet I venture to assert that a greater portion of aged roans does not exist.

"Others credit black horses with being allied to the devil himself for temper and untrustworthiness. The only objection to him is that he is very rusty in his winter garb.

"' White legs are always a sign of weakness,' you are told by many. But I think three to one would be fair betting against the one white leg out of a set of four, the others being black. What about Odd Stockings and All Fours? Surely if white legs were a sign of weakness, such horses should break down at a very early stage of their career. Most judges prefer bays with black points, and it would be difficult to beat them for general appearance the year through, but I for one should certainly deny to them a monopoly of sound constitutions, tractability, intelligence, and all other virtues. I am quite with Mr. Basil Gray in his general remarks, but even he errs the other way, as he credits white legs with being indicative of some peculiar virtue-or, as he says, they always denote quality.' This I very much doubt. That skillful breaking and future wise education has most to do with the character and usefulness of a horse, as well as a man, irrespective of his color, can, I think, he accepted as a settled fact. Renfrew was a splendid tempered horse until teased to such an extent that he became a maneater. Many a two-legged brother has had his character spoiled by those who should have helped to make him better. That horses, like men, have their temperaments goes without saying. That an eye for the beautiful leads fanciers to reject piebald, skewbald, and horses with wall eyes and big blazes for hacks or carriage purposes is not to be wondered at. But that any should condemn many of our really beautiful chestnuts is an enigma.

"The objection purely to color is, I think, much akin to the action of one who crosses himself when passing in the street a person with oblique vision."— Bell's London Messenger.

### Cheap Street Car Fares in Philadelphia.

The reduction of fare by the trolley cars to Germantown to 5 cents and to Wissahickon and Manayunk to 8 cents furnishes two very practical illustrations of the benefit to the public of the introduction of the new street car motor. One reduction was inspired by competition and the other appears to have been a concession to a popular demand, possibly expedited by a desire to anticipate steam railroad competition. Under the reported traffic agreement between two lines occupying the chief streets lying immediately west of the Delaware, it is probable that with the opening of spring passengers will be carried from any part of the city to any of the principal entrances of the East and West Park for a single fare. It is equally probable that the competition of rival lines will result in single fare transportation to Frankford in the northeast and Darby in the southwest. That many people now residing south of Lehigh Avenue will seek homes farther from the heart of the city may be surely counted on. but the sections abandoned for residence purposes will probably be occupied for business purposes. This was the effect of the introduction of the old street cars. The introduction of the trolley has more than doubled the possible residence area of the city.-Philadelphia