

SCIENTIFIC AMERICAN

A WEEKLY JOURNAL OF PRACTICAL INFORMATION, ART, SCIENCE, MECHANICS, CHEMISTRY, AND MANUFACTURES.

Vol. XX.—No. 23.
[NEW SERIES.]

NEW YORK, JUNE 12, 1869.

{ \$3 per Annum.
[IN ADVANCE.]

Improved Combination Pleasure Velocipede.

A velocipede adapted to the use of all, old or young, large or small of either sex, skilled or unskilled, in which the pleasure of the exercise is enhanced by association, is the one of which we give an engraving. The action and details of this invention are so well delineated by our artist that scarcely any description is necessary. In looking at the picture one is seized with desire to mount and enjoy the exhilarating sport.

This machine is designed for use in private and public pleasure grounds, or to be let by the hour at large fairs and other public gatherings at which we can conceive of nothing more likely to prove remunerative. It combines all the advantages of the circular railway, so popular at Saratoga

tion of the principle of the velocipede than this has been brought out. It is capable of enlargement to accommodate more riders, and contains elements of popularity which will doubtless amply remunerate its ingenious inventor.

Patented through the Scientific American Patent Agency, May 4, 1869. Address for further information G. J. Sturdy & Co., 118 Dorance street, Providence, R. I. State and county rights for sale.

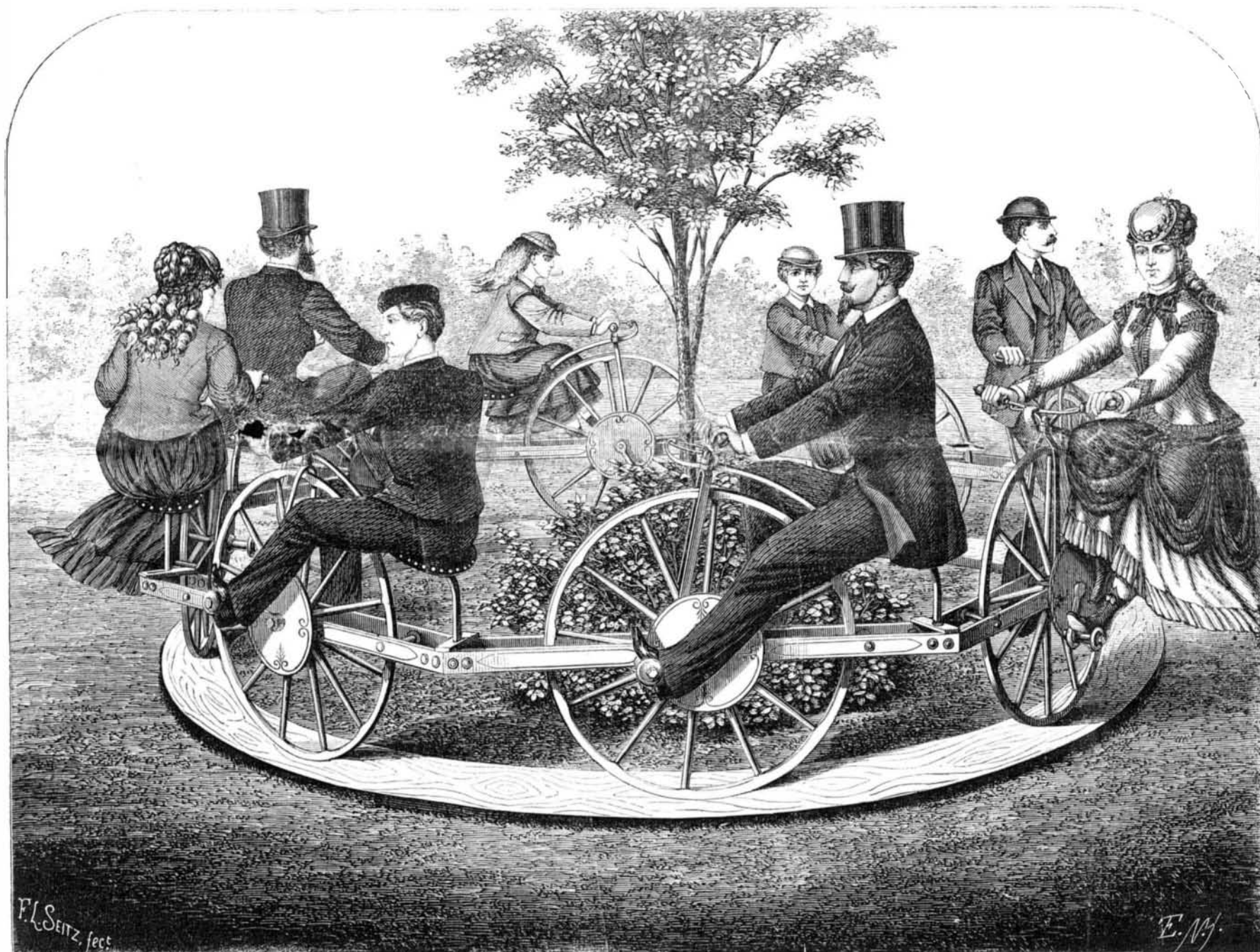
ANTIMONY.

The story goes that a Benedictine monk, named Basil Valentine, who lived about the time of Luther, at Erfurt, and was fond of scientific researches, gave metallic powders to some

native; but as it serves to enliven the tedium of a lecture on this metal, it will no doubt retain its place in our books, and be told to all future generations as a capital joke upon Valentine.

The compounds of antimony were known to the most ancient races, and it was used by the women of the East chiefly for staining the upper and under edges of the eyelids, so as to increase the apparent size of the eye. It is said of Jezebel that she "put her eyes in sulphuret of antimony," as the passage literally means, when Jehu came to Jezreel; and the ancient Greeks called the ore *broad eye*, from this custom.

The alchemists entertained great hopes of the new metal. As they called the acid that could dissolve gold *aqua-regia*, or



STURDY AND YOUNG'S CIRCULAR VELOCIPED.

Springs and other pleasure resorts, with only a small fraction of the cost of such railways.

The way is made of scantlings or planks so arranged as to form a circular course upon which the combined efforts of a party of riders can get up an extraordinary speed. The handles are merely for the purpose of steadying the riders, as the apparatus needs no guidance. Each wheel when manned, either by ladies or gentlemen, is a driving wheel. Brakes can be attached if desired.

The arrangement of the apparatus in a pleasure ground or courtyard may be made very ornamental, and it will afford inexhaustible and healthful merriment to persons of all ages.

It would seem impossible for the most worn-out man of business to mount one of these seats with a party of spirited young people and not forget for the time that he was other than a rollicking lad in his "teens."

It does one's heart good says our enthusiastic informant, to hear children fairly shriek with glee as the maximum speed is attained. It has moreover this advantage that there is less liability to accident than with many other amusements of which children are fond.

Probably no more durable, useful, and attractive applica-

hogs, the effect of which was to purge them thoroughly and then to fatten them. He wrote a book called the "Triumph of Antimony," in which occurs the following curious passage:

"Let men know that antimony not only purgeth gold, cleaneth and frees it from every peregrine matter, and from all other metals, but also (by a power innate in itself) effects the same in man and beasts. If a farmer purpose in himself to keep up and fatten any of his cattle—as for example, a hog—two or three days before let him give to the swine a convenient dose of crude antimony, about half a drachm, mixed with his food, that by it he may be purged; through which purgative he will not only acquire an appetite to his meat, but the sooner increase and be fattened. And if any swine labor with a disease about his liver, antimony causeth it to be dried up and expelled."

In the kindness of his heart, Valentine thought what a good thing it would be to give some of this fattening powder to his fasting brethren. Unfortunately for the success of the theory, all who partook of it died; hereupon the poisonous mineral was called *anti-moine*, or *antimony*—destructive to monks. There is probably more fancy than fact in this nar-

royal water, so they named antimony *regulus*, or little king, because it so easily attacks and renders brittle, and thus destroys gold. It was also called the wolf among metals, on account of this property of devouring the harmless lambs of the flock. Although the compounds were so long known, the metal itself was not prepared until about the same time as Columbus discovered America. There is something interesting in this coincidence, as the narrative of the great navigator's exploits would have reached but a small portion of the inhabitants of the globe, if it had not been for the invention of movable types, made from antimony and lead, with which to print the story. And to cite another freak of invention, we will state that the shafts of the steamships that cross the ocean, rest in bearings largely made of antimony—and thus commerce and letters owe a great debt to this metal.

We sometimes find antimony in a pure state directly upon the surface of the earth, but this would be too good fortune to be lasting, and in actual mining very little is obtained from such a source. We meet with it in combination with arsenic—in fact, the two metals, arsenic and antimony, appear to have a great affection for each other, and are often found together. Their habits are very much alike, and they are mu-