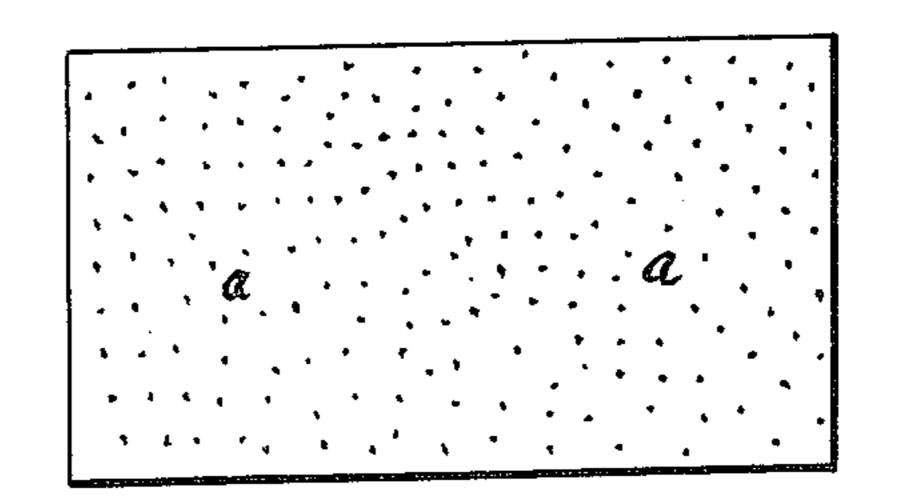
(No Model.)

E. M. HARRIS. CIGARETTE.

No. 439,004.

Patented Oct. 21, 1890.

Fig. 1.



Joseph Hackay.

Edward manshall stavrisy

## United States Patent Office.

EDWARD MARSHALL HARRIS, OF NEW YORK, N. Y.

## CIGARETTE.

SPECIFICATION forming part of Letters Patent No. 439,004, dated October 21, 1890.

Application filed November 29, 1889. Serial No. 331,981. (No specimens,)

To all whom it may concern:

Be it known that I, EDWARD MARSHALL HARRIS, a citizen of the United States, residing in the city, county, and State of New York, have invented a new and useful Improvement in the Manufacture of Cigarettes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the hollow cylinders or paper wrappers at present used to encircle the tobacco of cigarettes, which are dense and impervious to the atmosphere from with-15 out, and through which the subtle, injurious, and poisonous vapors eliminated from the tobacco within by heat and combustion are unable to escape, and are consequently drawn into the mouth of the smoker, injuring the 2c lips, drying the tongue and palate, and which, by means of the many nerves opening into the mouth and the tender follicles of the mucous membrane, are distributed through and absorbed by the system to its weakness and 25 injury. The smoke intermingled with these vapors, if inhaled persistently, is harmful to the throat, sometimes causing cancer, and passing into the delicate air-cells of the lungs these vital organs become weakened, the nerv-30 ous system shattered, and indigestion, intestinal sluggishness, heart-failure, heart-palpitation, and blood-poisoning from absorption are some of the evil consequences resulting.

My invention is illustrated by the annexed drawings, which are intended to form part of this my specification.

Figure 1 represents the outside covering or wrapper to encircle the tobacco of the cigarette, the letters a a denoting the perforations or punctures for the ingress of atmosphere and egress of vapors eliminated from the tobacco by heat and combustion. Fig. 2 shows a cigarette the tobacco of which is encircled with the punctured or perforated wrapper, Fig. 1, the

letters a a denoting the perforations or punctures extending from end to end of the cigarette, the letter b representing the tobacco.

The object of my invention is to deprive cigarettes of their baneful effects and render them innocuous, and this I accomplish by con- 50 structing them in the following manner: I encircle the tobacco with a paper wrapper, Fig. 1, having minute perforations or punctures a a extending around the cigarette from end to end, Fig. 2, to admit the atmosphere 55 to commingle with the tobacco-smoke during its entire passage through the cigarette, and at same time allow egress to any subtle vapors, and thus prevent the generation of the oils of creosote and nicotianine and the pow- 60 erful alkaline, nicotine, cause the cigarettes to draw more freely, and remain burning much longer when out of the mouth.

I am aware that antecedently to my invention cigarettes with a mouth-piece have been 65 fabricated in Great Britain, having one or more orifices situate in the cover of the cigarette just outside the lips of the smoker, to allow air to pass into the mouth with the smoke; but only at a small part of the cigarette— 70 namely, near the lips of the smoker—can air obtain ingress, the whole of the other portion of the cigarette being impervious to the atmosphere. This does not embrace, nor could it possibly attain, the objects and results accomplished effectually by my invention. Hence I do not claim any such construction.

What I claim as my invention, and desire to secure by Letters Patent, is—

A cigarette having minute perforations or 80 punctures in its wrapper, the said perforations or punctures being distributed substantially throughout the length of the cigarette.

EDWARD MARSHALL HARRIS.

Witnesses:

EUGENE H. MACKAY, JOSIAS TAYLER.