

by a former mixture, it has little or no farther effect. . . .

Air diminished by this mixture of iron filings and sulphur, is exceedingly noxious to animals, and I have not perceived that it grows any better by keeping in water. The smell of it is at first very pungent and offensive, which must be owing to a quantity of vitriolic acid air generated in the process.

The quantity of this mixture which I made use of in the preceding experiments, was from two to four ounce measures; but I did not perceive, but that the diminution of the quantity of air (which was generally about twenty ounce measures) was as great with the smallest, as with the largest quantity. How small a quantity is necessary to diminish a given quantity of air to a *maximum*, I have made no experiments to ascertain.

Named by Lavoisier

ELEMENTS OF CHEMISTRY, in a New Systematic Order, containing all the Modern Discoveries. By Mr. Lavoisier, translated from the French by Robert Kerr. Edinburgh: William Creech, MDCCXC (1790).

I mentioned before, that we have two ways of determining the constituent parts of atmospheric air, the method of analysis, and that by synthesis. The calcination of mercury has furnished us with an example of each of these methods, since, after having robbed the respirable part of its base, by means of the mercury, we have restored it, so as to recombine an air precisely similar to that of the atmosphere. But we can equally accomplish this synthetic composition of atmospheric air, by borrowing the materials of which it is composed from different kingdoms of nature. We shall see hereafter that, when animal substances are dissolved in the nitric acid, a great quantity of gas is disengaged, which extinguishes light, and is unfit for animal respiration, being exactly similar to the noxious or mephitic part of atmospheric air. And, if we take 73 parts, by weight, of this elastic fluid, and mix it with 27 parts of highly respirable air, procured from calcined mercury, we will form an elastic fluid precisely similar to atmospheric air in all its properties. . . .

The chemical properties of the noxious portion of atmospheric air being hitherto but little known, we have been satisfied to derive the name of its base from its known quality of killing such animals as are forced to breathe it, giv-

ing it the name of *azote*, from the Greek primitive particle *a* and *zoe, vita*; hence the name of the noxious part of atmospheric air is *azotic gas*; the weight of which, in the same temperature, and under the same pressure, is 1 *oz.* 2 *grs.* and 48 *grs.* to the cubical foot, or 0.4444 of a grain to the cubical inch. We cannot deny that this name appears somewhat extraordinary; but this must be the case with all new terms, which cannot be expected to become familiar until they have been some time in use. We long endeavoured to find a more proper designation without success; it was at first proposed to call it *alkaligen gas*, as, from the experiments of Mr.

Berthollet, it appears to enter into the composition of ammoniac, or volatile alkali; but then, we have as yet no proof of its making one of the constituent elements of the other alkalies; beside, it is proved to compose a part of the nitric acid, which gives as good reason to have called it *nitrogen*. For these reasons, finding it necessary to reject any name upon systematic principles, we have considered that we have run no risk of mistake in adopting the terms of *azote*, and *azotic gas*, which only express a matter of fact, or that property which it possesses, of depriving such animals as breathe it of their lives.

Science News Letter, August 13, 1932

CONSERVATION

European "Decoy Ponds" Cause Slaughter of Wild Ducks

EUROPEAN conservationists and zoologists are watching the development of America's efforts to save its wild ducks with much sympathy and considerable interest. The effort to put down the commercial exploitation of game in America is being followed especially closely, because Europe, with a smaller wild-life population and a much more intense pressure for food by the human population, has permitted a much more extensive killing of wild ducks for market purposes.

A European institution that has no American counterpart is the commercial decoy pond. Decoy ponds are bodies of water to which ducks are attracted, sometimes with the additional lure of food. On their shores are structures of various types which serve as traps. The ducks, lured into them, leave only as carcasses headed for the market. The annual drain of these ponds on the European wild-duck population is a serious one.

In Germany there are at present eleven decoy ponds, with an average annual catch of 40,000 ducks. In Denmark there are two with an annual average of 12,000; in Belgium there are four, but the average is not stated; England has twenty-one such ponds but the average kill is only about 600; the English use the ponds for sport, not for gain.

Holland has the greatest number of ponds, the number of the catch of which has been, until recently, suppressed in the interest of the Dutch canning indus-

try, which takes the catch and has built up a profitable export trade thereon. Now, at last a Dutch ornithological organ has published a statement. There are, according to it, 145 ponds in Holland, most of which are in the provinces of Gelderland, South Holland and North Brabant. The average annual catch is 300,000 ducks.

The open season lasts from July 27 until February 14, sometimes even until March 13. The bands or banded birds have shown that the majority of the ducks caught in Holland come from Scandinavia and Finland. In the long run the supply will unquestionably become diminished at the present rate of destruction.

It is obviously well-nigh impossible at present to expect much remedy, as the Dutch Government is unwilling to interfere with a profitable home industry; yet if the open season were only somewhat shortened some relief would ensue. An effort will therefore be made at the coming International Conference to bring about certain changes in the Paris Bird Protection Convention of 1902, to reduce the open season to a period lasting from September 15 to January 31.

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A museum of Asiatic arts has been established in Amsterdam.

Trading glass beads to the Indians was so important in colonial America that a factory making glass beads was set up at Jamestown, Virginia, in 1608.