

# 19th century textbook illustrations



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## The Toxic Effects of Carbon Dioxide

“Carbonic acid gas is formed not only in our fireplaces and in living bodies. In certain countries it oozes abundantly out of the earth. In the island of Java there is said to be a valley in which the soil emits such quantities that nothing can live within its bounds, and the very birds that venture to fly through it fall down overpowered and die. Near Naples, at Pozzuolo, there is a grotto (Fig. 147) in which a man can walk without danger, but into which a dog cannot enter without

being asphyxiated by the carbonic acid that escapes from the soil. You ask why there is danger for a dog while a man is in safety. It is because carbonic acid, being heavier than the air, remains low down near the ground.

Carbonic acid is also formed during the fermentation of beer or of wine. Hence the danger in making wine or beer in insufficiently ventilated places (Fig. 148).”<sup>1</sup>

<sup>1</sup>Bert, P., “First Steps in Scientific Knowledge, Part V.—Chemistry,” J. B. Lippincott Co., Philadelphia, Penn., 1886, pp. 118–119.

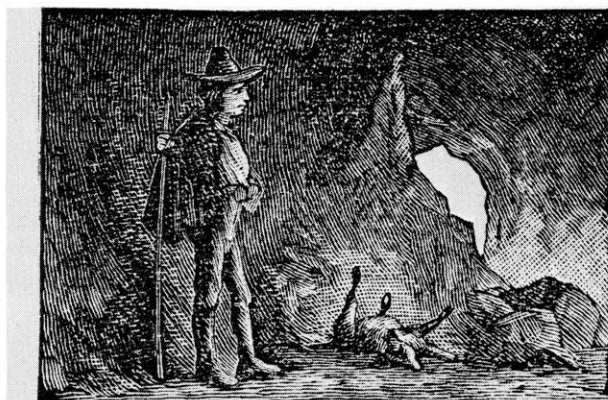


FIG. 147.



FIG. 148.