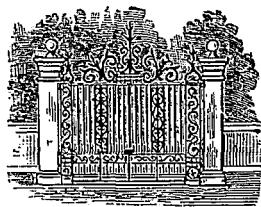


— Outside the Gates. —

WOMEN.



It is the opinion of the Hon. Davis H. Waite, Governor of Colorado, that in America, Women's Suffrage must come from the People's Party; and he discourses as follows in the *North American Review*:—

"As the result of last Fall's election, the women of Colorado were enfranchised and became possessed of all the rights of citizenship. In republics there are two principles in favour of equal suffrage against which no just objection can be made.—

1. There should be no taxation without representation.

2. Suffrage should be based on intelligence.

Governments derive their just powers from the consent of the governed. If a woman has the mental ability to protest against unjust laws, and to demand enactments calculated to promote the general welfare, why should not her wishes, and most especially when she is taken as a citizen, be consulted in the exercise of the powers of the Government?

The tendency of the age has been to the extension of suffrage, but regardless of the rights of women. The elective franchise was given to the Negro in the South, with all his unfitness. From a very early period, in the great North-west, the bars of suffrage have been let down, and the most ignorant male foreigners, unable to speak our language or to realise the meaning of the "declaration of intentions," or even the act of voting, have been endowed with suffrage in advance of citizenship; and many of them have shamelessly sold their votes to yet more shameless buyers.

The political rights of women in the past have been practically ignored in the United States, though recognised in Utah, Wyoming, Washington, and now in Colorado. Man, with his physical and mental superiority, has had unlimited control both in this and all other nations, and none can deny that liberty is endangered, and human rights are stricken down all over the world; and as Bishop Simpson, a distinguished Methodist divine, said in 1864, no great moral reform will ever be enforced by law until the right of suffrage be given to women.

Women are certainly weaker physically, and, perhaps, as a mass, weaker mentally than men. A proper sphere of woman, without doubt, is to bear children, and this fact will prevent women engaging so extensively as man in legislative and official duties; but it deserves little consideration as against the rights of women to suffrage, or to hold office, if she is the choice of the people. It is true, women cannot fight in the ranks; but battles are not won wholly in the field. The patriotic women, both North and South, in the late "unpleasantness," in their own legitimate way, accomplished as much, and perhaps more, than the warriors on the battle-field.

The principle of equal rights for all, against which, for the past quarter of a century, the two old parties

have waged relentless war, is the sign by which the People's Party is to conquer. It will, at no distant day, not only redeem women from political servitude, but also emancipate man and woman from industrial slavery."

Science Notes.

ASPHYXIA.

THE ends served by respiration are to supply the blood with fresh oxygen, and to remove from it carbon dioxide, but recent experiments on gold fish show that if the second only of these ends is provided for, asphyxia may be prevented, at least for a time.

In considering the respiration of fishes, it is necessary to recognise that they, like ourselves, are dependent on the oxygen of the air, although they are adapted to utilise only such oxygen as is dissolved in water. The oxygen, which is chemically combined with hydrogen to form water, is not available to oxygenise the blood, because, being already part of a compound, it is not disposed to enter into combination with the colouring matter of the red blood corpuscles, or to unite with the carbon of the tissues.

A gold fish can live for two and a half days in a litre (about 1½ pints) of water completely shut off from the air, and about a day in boiled water. In the first case, the fish would have a certain limited supply of oxygen dissolved in the water, and also an opportunity to part with carbon dioxide, this gas being soluble in water to a much greater degree than oxygen. In the boiled water there would be no oxygen, or practically none, for boiling tends to drive out the dissolved gases from water (hence the flat insipid taste of boiled water), but there would still be the possibility of giving up carbon dioxide. If the fish, in a dying condition, is removed to a second litre of boiled water, it recovers to a certain extent, and lives another 10 hours or more. It has also been shown that a little caustic soda added to the water, enables the fish to live longer in boiled water, the reason being that the soda and dissolved carbon dioxide unite chemically, and this action renews the capacity of the water to dissolve carbon dioxide. Conversely, it has been shown that the fish die almost immediately in water charged with carbon dioxide, because, being saturated, it is incapable of dissolving more of the gas.

Further experiments were made on the person of one of the physiologists, who are responsible for the above investigations. An attempt was made to breathe equal quantities of carbon dioxide and air; this produced spasm of the glottis, and thus rendered respiration impossible. Thirty per cent. of carbon dioxide was breathed for a minute only, and produced symptoms of dyspnoea, the initial stage of asphyxia; 22 per cent. of the gas caused less inconvenience, while 8 per cent. caused much more ample breathing than usual. The difference in constitution should be carefully noted between this mixture of gases and an atmosphere vitiated to the same extent by carbon dioxide, due to breathing in confined air. In the experiment, the 8 per cent. of carbon dioxide replaced a portion of both the nitrogen and oxygen of ordinary air, and therefore the percentage of oxygen was

[previous page](#)

[next page](#)