

He put the process into operation in May last by subjecting thirty-eight dogs to the fatal vapor, and all passed rapidly into sleep and from sleep into death. Since then from 200 to 250 dogs per week have been painlessly killed in the chamber. The number struck us as unusually large, and we were almost tempted to ask what the anti-vivisectionists were about, and why they so cruelly abandoned so many of their pets—7,000 in a few months—to starvation or to the tender mercies of the police and the uncertainty of prussic acid. The numbers, however, Dr. Richardson said, had been exceptionally large and the experimental results so entirely practical and successful that he felt the time had come for him to place them fully before the public. The process at first was not unaccompanied with difficulties—first, in determining the anæsthetic to be employed, and next as to the most efficient form of chamber in which the animals should be exposed to the lethal gas or vapor. Out of a list of twenty-two anæsthetics he had selected four of the best known among them, which he subjected to a careful series of trials, and of these he finally selected carbonic oxide as the easiest to deal with and the least expensive. The lethal chamber is filled with gas by an ingeniously constructed Clarke's stove.

As to the painlessness of the death of the dogs, there can be no doubt whatever, and Dr. Richardson firmly believes that the same method might be used for the destruction of those animals which supply us with food. Indeed, he has already tried it with sheep, which are put down to sleep with the greatest rapidity before being slaughtered, and it has been found that the carbonic oxide exercised no prejudicial influence over the flesh of the animals, nor did it unfit it in any way for the market as food.

The same process is found equally applicable to swine, calves and fowls, so that steps have been taken to carry out the lethal process on a large scale. The objection even to retention of blood so strongly felt by the Jewish people do not obtain by the process, as the animals in the sleep of death are found to yield up blood just as freely as in the ordinary way, or when no anæsthetic is used.

Upon the issue of these experiments Dr. Richardson deserves the gratitude of the entire community. Looked at from whatever point, his efforts were praiseworthy, and the results constitute a triumph to science and a boon to the lower creation. If—as he eloquently concluded his lecture—Science sometimes, for the sake of man, inflicts pain on the lower creation, here she relents, and does for the lower creation what she dare not do for man.

CREDE'S METHOD OF DELIVERY OF THE PLACENTA.—Dr. W. H. Taylor, in the *Cincinnati Lancet and Clinic*, says: The vigorous controversy over "Crede's method," which has recently involved so many obstetricians, has led Crede to re-

state in detail the manipulation he advises. As many American practitioners habitually adopt what they believe is his practice, I think it will be of interest to know exactly what that method is, I therefore have translated his own description, giving the italics as found in the original, in the *Archiv. für Gynakologie*, xxiii, 2, 213:

... "The natural detachment of the placenta occurs within a few minutes after the birth of the child, and is recognized by a discharge of blood and by marked diminution of the size of the uterus, which may now be felt as a firm ball, the size of a child's head, between the umbilicus and pubes. As soon as any after-pains have occurred the midwife grasps the entire uterus through the abdominal walls with both hands and presses it toward the concavity of the sacrum, she repeats this *several times*, if necessary, *but only during a pain*, until the placenta is found at the vulva or is entirely expelled. If, from imperfect contraction of the uterus, or from tenderness of the abdominal walls, sufficient pressure to expel the placenta can not be made, the attendant, guided by the umbilical cord, feels carefully in the vagina for the placenta; if a portion is felt, then, with one hand, *gentle* traction is made on the umbilical cord, while with the other pressure is made over the uterus. If the point of insertion of the cord in the placenta can not be reached, or if on *gentle* traction of the cord resistance is felt, no further effort to deliver the placenta in this way may be made until after *several uterine contractions* have occurred, which may be increased by *gentle* rubbing and pressure. If the placenta is found low in the vagina, and readily reached by the finger, then the attendant shall pass the index and middle fingers as far upon the placenta as possible and press it gently downward and backward, while with the left hand the cord is made tense. When the placenta appears at the vulva the attendant shall grasp it with the fingers of one hand, and draw it gently upward and slowly turn it upon itself several times in order that the membranes may form a cord and not be torn away. When delivered the entire after-birth and any coagula are removed under the flexed leg of the woman and placed in an empty basin.

"*All strong traction* on the umbilical cord, or attempts to extract the placenta when high up by introducing a part or the whole hand, or to aid the efforts at extraction by straining, coughing, blowing in the hands, etc., are *very dangerous* and therefore are *forbidden*."

HIP-JOINT AMPUTATION. — DAVY'S LEVER.—The following important cases under the care of Mr. Haward, of St. George's Hospital, London, are reported in the *Lancet* for January 3, 1885:

John D—, aged twenty-four, received in May last a blow on the right buttock from the buffer of