cicatrix, so far back that it will be entirely out of the way of the pressure of an artificial limb.

It remained perfectly sound to December, when I last saw it. In answer to my inquiry in regard to the patient's condition, the following note dated May 16th received from him may be of interest as giving the satisfactory result in his own language.

"Dear Sir:—I commenced to attend the railroad target on Sept. 1, 1872, and have continued to do so up to the present time. The stump has remained healed and sound since it first healed up in July last, and has given me no trouble since whatever.

"On Jan. 17th, 1873, I commenced to wear an artificial limb and have worn it every day since, being able to walk without cane or crutch. I have not lost an hour's time, since I commenced work last Sept., on account of the stump."

AAR. XIV.—On the Oxytocic Properties of Quinia. By S. HIRAM PLUMB, M.D., of Red Creek, N. Y.

As there has been considerable discussion recently in the medical journals in regard to the question whether quinia possesses oxytocic properties, I am induced to contribute my mite towards its solution. So far as it has come under my notice, the argument thus far amounts to this: One asserts positively, "I have given quinia in cases of lingering labour with a view to oxytocic results, and have obtained them; therefore quinia must and does possess such properties." Another replies negatively, "I have practised medicine in a malarious section of country for many years, and have given a great deal of quinia to pregnant women without producing abortions or premature labour, and therefore quinia cannot and does not act as an oxytocic."

Now the first step towards a solution of this question, as in so many others, is to clearly understand the meaning of the terms employed. An oxytocic is defined to be "a medicine which promotes delivery," not as a medicine which induces delivery. Between inducing the parturient effort in a gravid uterus quietly carrying its burden through its appointed term, and promoting that effort when the term has been completed or disturbed, there is a wide difference; in the one instance the normal function of the womb is passively to retain and nourish; in the other actively to contract and expel. Medicine, the effect of which would be as a tonic to brace and sustain the system in a normal, healthy condition of vital action, would not induce labour, but would promote delivery.

Without doubt ergot is generally regarded as the standard or representative oxytocic. And what are the facts in regard to ergot? Simply this, that given in labour it has the power to so augment the uterine contraction as to hasten the process; in other words, to "promote delivery." And thus when judiciously employed it not only saves valuable time to the attending physician, and hours of needlessly prolonged suffering to the

patient, but may save an unborn infant from threatened death from suffocation, or a mother from a death impending through exhaustion, or flooding. This result we obtain from ergot, given under each condition, with probably as great a degree of certainty as we get the peculiar and desired effect of any other active medicine when appropriately administered.

But ergot by no means possesses an equal power of originating or inducing parturition; and fortunate is it for the human race that such is the fact. Other uses and effects of ergot need not enter into this question. Suffice that it has such, and at this day it would not be regarded as good logic to say, that, because it subserves other purposes, and when administered for these does not first inevitably empty the womb, therefore it is not an oxytocic. Neither, I submit, is it logical to argue, that, because quinia can safely be given to patients in the gravid state, therefore it has no oxytocic properties.

For more than 25 years I have practised medicine in a malarious district, and have very often administered quinin to women in pregnancy without any ill results; in fact I more fear that a continuance of chills and fever would provoke abortion or premature labour, than that the quinin required to arrest the chills would do so. For more than 15 years I have also given quinia as an oxytocic, commencing to use it in cases of labour in patients enfeebled by malarial disease; and, finding that it not only sustained the patient, but *seemed* to promote delivery, continued the practice until fully convinced that it *did* promote delivery, and then gave it for that purpose alone in cases of lingering labour, in patients not depressed by malarin. One such case permit me to recite:—

February 26th, 1869, I was called four miles from town to attend a lady in her third confinement, and who had been similarly my patient in her former labours, the first of which was severe and the second easy. A few minutes after my arrival at the house, under a slight pain she had a copious gush of blood; making an immediate examination, I found myself confronted by "placenta prævia." Having nothing more reliable at hand, I administered at once about three grains of quinia, and sent a messenger to my office for ergot and my instruments. The womb responded promptly to the quinia and manipulation; there was but little more hemorrhage, and before the return of the messenger the labour was so far advanced and the contraction so firm that she was promptly and safely delivered without the use of ergot or instruments. The child was so exsanguinated that it gave only a few feeble gasps, and all efforts to resuscitate it were unavailing; the mother's recovery was good.

I think, under quinia, the labour pains preserve their natural intermittent character, and do not become a constant pressure, as under the influence of ergot.

I now administer quinia to my practice as an oxytocic probably quite as often as ergot, and with nearly the same certainty of its fulfilling that condition.

RED CREEK, May 16th, 1873.

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