these, and the continuous use of this active treatment in all stages of the disease, that I consider most injudicious, and which has led me to call attention to a remedy from which I have seen such beneficial effects. While it relieves the symptoms, it supports the system. I do not introduce it as a new remedy in the tonic treatment of hooping-cough, or as a new discovery; for, forty years ago, decoction of cinchona and tincture of assafoetida were recommended, and were then considered to be a specific for this disease. The antispasmodic effects of assafoetida, in combination with bark or any other bitter, I have no doubt, would relieve the cough, and tend to restore the strength of the patient; but the odour of this remedy is a bar to its general usefulness.

The following is the form of my mixture:—

R Acidi sulphurici diluti 3 iss.

Tincturæ opii 3 ss.

Infusi quassiae 3vj. M.

Fiat mistura, cujus sumantur cochlearia magna ij vel iij ter die.

For Infants.

R Syrupi tolutani 3i.

" papaveris albi 3ss.

Acidi sulphurici diluti xx gtt.

Infusi quassiae 3vj. M.

Fiat mistura cujus sumantur cochleare parvum vel ij ter die.

In making the infusion of quassia, I add ten grains of cochineal to the pint; with the acid, it makes a beautiful mixture. The quassia, being a pure bitter, sits easily on the stomach, and seems to agree with most patients.

As the violent fits of hooping cough excite an unusual action of the muscles of the back and chest, and which is sometimes distressing, I have found a warm plaster between the shoulders and on the chest a great comfort and support to the patient.

This tonic mode of treatment of pertussis, as I have stated before, may not be new; still I think those who bring before, or draw the attention of the profession to, old remedies in new combinations, for the relief of any of the ills that flesh is heir to, are doing just as much good as they would by discovering a new remedy. In the fifth volume of the *Provincial Medical Journal*, there is a paper on the Treatment of Hooping-Cough with cochineal, by Dr. C. Wachtl of Vienna. I have not enough faith to believe that the small quantity, ten grains to the pint, which I add to my infusion, can have any effect, though we know that cochineal is one of the popular remedies for hooping-cough.

Bath, July 20th, 1854.

ARTIFICIAL ELASTIC EXTENSOR IN WRIST DROP.

By T. INMAN, M.D.

THE following case may be interesting to some of the readers of the *Provincial Medical and Surgical Association*.

CASE. A. B., aged 36, was brought into the Liverpool Northern Hospital, suffering from palsy of the extensor muscles of the left forearm. He was a tinman, and had had a good deal of working in lead about six months previously; his left hand and arm had been far more frequently in contact with that metal than the right. Three months after he had ceased to work with lead, wrist drop came rapidly on. No other sign of lead poisoning had been noticed.

Galvanism, friction, etc., were applied for its relief, but with little success. On his admission, I directed that a firm band should be placed above the elbow, a strong glove upon the hand, and that these two should be connected by a piece of vulcanised India rubber, of sufficient strength, and in such a manner, that the hand should be slightly drawn backwards. This answered admirably; and the man was so delighted with this substitute for his extensor muscles, that he did not care to remain under treatment until they had recovered.

Liverpool, July 1854.

CASE OF BITE BY AN ADDER, FOLLOWED BY RECOVERY.

By GEORGE WILLIS, M.D.

THE woods about Monmouth are, unhappily for us who live in their vicinity, infested with adders, which frequently bite dogs, sheep, and even full grown oxen. The result of the bite is fatal as a general rule.

At some future time, I may perhaps note down for publication some of the *post mortem* appearances found in animals which have been in this way destroyed. Meantime, the relation of the following case, in which the human subject was the sufferer, but in which recovery took place, may not prove uninteresting or unimportant.

CASE. On May 6th of the present year, I was called to see Miss H., a child nine years of age, of fine healthy constitution, who, while picking wild flowers in the woods, had been bitten by an adder in the thumb of the right hand. The accident occurred about three-quarters of an hour previous to my visit. The thumb almost instantly became considerably swollen, and severely painful. About half an hour later, she had pain in the bowels, free purging, and vomiting. Great prostration soon followed. On removing a poultice that had been applied over the bitten part, I discovered a very slight wound on the palmar aspect of the thumb; but no pain was now complained of, nor did I perceive any particular appearance of swelling. Instead of renewing the poultice, I rolled round the thumb a piece of lint, soaked previously in a solution of strong liquor ammoniæ, and gave internally ten drops of sal volatile in water every ten minutes, the stomach rarely retaining the medicine above three or four minutes. During the course of the following half hour the depression continued, and syncope seemed imminent; the pain of the bowels also increased, for which a mustard poultice was laid over the abdomen, with some relief. For the space of two hours more, the sal volatile was occasionally repeated, a few drops of paregoric being added to each dose. The medicine was at last retained, and the little patient fell into a firm but gentle sleep.

In the evening of the day, six hours after the accident, the mind was quite tranquil, the depression had passed off, and all pain was removed. A little milk was allowed for supper, and a dose of castor oil ordered for the following morning.

About the noon of the next day, feverish symptoms supervened. The thumb subsequently became red and swollen, and the whole limb was soon in a like condition, with the skin of the hand and forearm glistening and tense; the lymphatics were red to the axilla, and the glands of the axilla were painful. Three leeches were applied to the forearm, and the whole limb was kept raised and surrounded by flannels, wrung out of a decoction of poppy heads. Simple saline medicine was given internally.

On the 8th and 9th, improvement began to take place, the systemic disturbance ceased, and the local inflammation passed away. On the 9th, the limb was dressed with a little warm oil, and covered with flannel simply, and the saline was discontinued. From this time, no other remarkable symptom occurred, and the limb regained its normal size in eight days; but a dark inky looking line was left, extending from the wrist up to the armpit, and has scarcely disappeared at this date, June 2nd.

REMARKS. In perusing such reports of cases of adder bite as I have access to here, I find the authors stating, without an exception, that swelling of the limb follows immediately after the infliction of the injury. In the case above related, the effects were different; the immediate inflammation after the bite becoming suddenly arrested for at least twenty-four hours, and being preceded in its reappearance by the ordinary feverish constitutional symptoms.

The sudden commencement of vomiting and purging after the bite, is a subject of some interest and novelty. How far the intestinal derangement had to do in modifying the inflammatory symptoms, and in saving the patient, is a great question. From the depression it induced, it is ob-

vious that it acted as a violent natural antiphlogistic measure, as antimony would have acted if given in a poisonous dose; and I cannot but think that it was of considerable service.

Another question has crossed my mind, namely, What excited the stomach and bowels to such excessive action? I could trace these effects back to nothing that the patient had eaten previously; and the matter of a bite and the pain following it is not a cause sufficient. The only supposition that remains is, that the poisonous substance inoculated into the wound by the reptile was rapidly absorbed into the circulation, and set up the symptoms I have described. By way of sustaining such a theory, it would be a most interesting experiment to introduce a large dose of the snake venom into the stomach of an animal, and to see whether by its direct local application to the alimentary mucous surface the same results would be obtained.

Monmouth, June 24, 1854.

BIBLIOGRAPHICAL NOTICES.

ANATOMICAL AND PHYSIOLOGICAL OBSERVATIONS. By JOHN STRUTHERS, M.D., Lecturer on Anatomy. Part I. Edinburgh and London: 1854.

THIS volume consists of papers by Dr. STRUTHERS which have already appeared in the monthly and other journals, and are probably well known to most anatomists. The author has done well to reproduce them in a more accessible form, as they are for the most part records of important anatomical facts which in some cases throw light on obscure points of physiology, and in others, bear on the practice of medicine and surgery.

The first paper is on the Supra-Condyloid Process of the Humerus, and this subject is again more fully treated in paper xv, on the Abnormal Anatomy of the Arm. This process, which is sometimes developed in man to a large size, is important, principally from the relations often established between it and the humeral artery and median nerve, which are found to pass behind and under cover of it; thus presenting an analogy to the normal arrangement of these parts in many of the lower animals, in which the vessel and nerve pass through a foramen of which the supra-condyloid process is the rudiment. The author gives a short description of fifteen specimens in which the process existed in one or both sides; nine of them being in his own possession. In the majority of these, the artery and nerve, or the nerve alone, passed behind the process.

Papers II, IV, VIII, and XII, relate to the Anatomy of the Orbit. The action of the oblique muscles is discussed fully in No. II, and the view of Porterfield "that the oblique muscles are specially provided for turning the eye more or less directly on its antero-posterior axis", which was adopted by Hunter, is supported by the author on anatomical grounds. It is strange that physiologists should put themselves out of the way to account for the presence of these muscles when it is so obvious that a partial rotation of the globe of the eye on its antero-posterior axis is necessary to keep the image of an object on the same point of the retina when the head rolls in the direction from shoulder to shoulder. The recti muscles clearly cannot accomplish this under any combination. The correctness of this view is also confirmed by Dr. Struthers through observations made on lower animals.

The consensual actions of the eye are ably discussed; it would exceed our limits, however, to bring forward even an outline of the arguments used.

The fifth paper contains remarks on a case of open foramen ovale with contracted pulmonary artery; and the sixth is an observation by Dr. Greig of a peculiar malformation of the heart and great vessels of a foetus, the pulmonary artery giving off the descending aorta and left subclavian.

The subject of paper VII is one of great practical interest, an Anatomical Inquiry into the Action of Local Blood-letting in Affections of the Internal Viscera. It is first shown that in the thorax and abdomen there is no vascular connexion whatever between the walls and the contained viscera, hence the author contends that local blood-letting over these parts can have no *special* influence on inflammation of the internal organs, and he denies that the serous membranes should be regarded as a medium through which the blood vessels of the viscera can be relieved. This is anatomically true, but the therapeutical inference cannot be so easily demonstrated. In inflammation limited to the liver, or kidney, or lung, it remains still to be proved whether the local abstraction of blood from the skin over them will not cause a more marked benefit than would a general or distant bleeding to the same extent. The action of a blister may serve as an illustration. The direct effect may be confined to the skin and areolar tissue beneath, but the condition of the organ within is undoubtedly more affected than it would be were the action to take place on some distant part. The author, however, still recommends local blood-letting in such cases, on the ground that we can never be sure that the inflammation is limited to the viscus, and that the serous membrane or some more external part may not be affected at the same time.

A description of an Esquimaux female Pelvis is given in paper IX.

The next paper is on the Semilunar Valves of the Heart. Some remarks are made on the varieties of these valves, and their natural action is described. The importance of the sinuses of Valsalva to their proper action is explained; and the author holds that the forcible throwing back of the valves and the consequent driving of the blood out of their cavities behind, must contribute to the production of the first sound of the heart fully more than the mere rushing of blood through the aortic and pulmonary orifices.

An interesting paper on Rudimentary Ribs and their Relation to the Vertebrae follows; to which, as well as to paper XIII, on Diverticula from the Small Intestines, we would refer the reader curious in anatomical anomalies. A short abstract is given of twenty-two cases of diverticula from which this position is determined as almost invariably occurring in some part of the ileum. Some cases are also given which indicate the importance of these anomalies in a pathological point of view—as causes of internal strangulations of the bowel—while sometimes they are said to form the contents of a hernial sac. No. XIV is a reprint of a review of Mr. Wilson's *Dissector's Manual*, and consists principally of corrections of the errors contained in that work—errors which we presume are perpetuated in it from the author's attention being no longer devoted to anatomy.

A paper on the Abnormal Anatomy of the Arm, before referred to, contains some very useful information to the surgeon. Variations from the normal anatomy of the muscular and vascular systems are so common in this region that the attention of the surgeon cannot be too frequently directed to them. The latter are made for the most part familiar enough through the excellent work of Mr. Quain; but the former are hardly less important, and are, perhaps, even more frequent. The last paper contains a careful and full description of Scarpa's fascia, and points out its relations to various surgical affections, such as hernia, infiltration of urine, etc.

We have thus presented a mere index to these observations; many of the subjects are well worth a more extended consideration. We would recommend the work, however, to all who are interested in the advance of anatomy and physiology. Those who have the opportunity would do well to imitate Dr. Struthers in thus carefully noting, recording, and reasoning on the facts which daily present themselves in the dissecting room, a mode of investigation which has perhaps too much fallen into neglect in favour of the more novel and alluring, but not more instructive study of histology.