ſpeedily proves fatal. In combating this affection, our author ſeems very properly to have placed his chief reliance on the liberal exhibition of the Peruvian bark, during the period of intermiſſion, or apyrexia. But he appears to heſitate with reſpect to the proper time of adminiſtering that medicine, when this fever aſſumes a remittent or continued type.

Every practitioner, however, who has carefully attended to the nature and ſymptoms of ſuch fevers, and witneſſed their rapid progreſs to a termination in a warm climate, muſt acknowledge, that whenever the remiſſions are inconſiderable, or great danger is apprehended from repeated paroxyſms, the bark ought to be preſcribed, not only without any regard whatever either to remiſſions or exacerbations, but in as large doſes as the ſtate of the patient's ſtomach will allow.

Pancras, Oct. 20, 1802. R. HALL.

Observations on the Zanthoxylon; communicated by Dr. G. Bellamy, *of Oreston.*

THE following obſervations are intended to illuſtrate the powerful and good effects of a medicine very little known in this country, but which appears to me, from my own experience in the uſe of it, and what I have heard from that of others, to bid fair for leſſening an opprobrium of the art, namely, inveterate ulcers of the legs, without a conſtitutional affection. I do not mean to confine its operation to the leg, as it will doubtleſs be equally or more efficacious in other parts of the body; but inveterate ulcers, not dependent on the ſtate of the ſyſtem at large, being very rare, except on the leg, its uſe on other parts will require the aid of conſtitutional remedies, or it may prove only palliative; even ſo far it is a deſideratum. The remedy is the Zanthoxylon, commonly called in the Weſt Indies Hercules' Club. There is a paper or two already in your Journal about it, communicated from Jamaica. I hope, what I have to ſay, will add to the knowledge of its general properties, and of its ſingular efficacy in ulcers; I ſay ſingular, becauſe it ſucceeded where every thing elſe that my information, or that of my medical friends near me, could ſuggeſt, had failed. It was the powder of its bark which I applied to the ſurface of the ſore, a piece of dry lint over, and if any, a ſlack bandage, or proportionably tight, according to the degree of retroceſſion of the ſurrounding integuments, and relaxed ſtate of the muſcles; preferring rather a generous diet with vegeta-

bles, and no salt meat. But I am told by Dr. Leonard Gillespie, late of Port Royal Hospital, Martinique, who first supplied me with the article, and directions for its use, that a tincture of the same locally applied is very efficacious; but to this form it may be objected, that we do not know how much we may owe to the stimulus of the spirit. Dr. G. further informed me, that employed internally, it proved according to the dose, tonic, diaphoretic, and diuretic; and is used also as a febrifuge; it is astringent and bitter. To my brother officers in the navy, who know how many lives have been lost, and rendered useless to the service, (and nearly so to Society at large, in too many instances a burthen to it and themselves) any improvement in this loathsome part of surgery must be particularly interesting; in all ships of war it bears a great proportion in the sick lists, and has existed with perhaps unprecedented malignity in the late war; in the Mediterranean, at the West Indies, and even in the Channel. However, I do not mean to infer that the Zanthoxylon will avail in that malignant state of ulcer, (which is scarce ever to be seen on shore except in our naval hospitals) which there is but too good grounds to think contagious; infectious they certainly are, so much so that it has been plainly proved, that every ulcer patient must be furnished with a distinct sponge, bandages, &c. &c.; for those which have been used for a malignant ulcer cannot be employed with impunity on a simple incision or mere scratch. For the use of Zanthoxylon in this dreadful disease my experience is not sufficient; but this I will be bound to assert, that their gangrenous sloughs once removed, and the sloughing process, which appears to me their chief characteristic, corrected, the Zanthoxylon will hasten the final cleansing, and rapidly promote the healing action; but until that is done, we might as soon expect it to cure where there is a diseased bone beneath, or a venereal, scrophulous, or other habit. Again, how far it may prevent the malignant stage, by being early employed in the incipient state of ulceration, and in most common ulcers, (for most wounds on board of ship do ulcerate, and even those malignant ones will be found to have been but simple wounds or ulcers) till an absorption of the specific virus by some unfortunate and perhaps unheeded communication: How else are we to account for the total absence of the malignant ulcer in many ships, though on the same station, and exposed to all the same relative circumstances, till some miserable object consuming under it, has been sent on board for a passage to an hospital, &c. See then what vigilance is necessary! and how much better it would have been to prevent than to cure, alas, than to endeavour to cure *only*.

It

It will be plainly ſeen, when I ſhall have related my caſe of the efficacy of Zanthoxylon, that that was not a caſe of malignant infectious ulcer, at leaſt of the kind above mentioned; perhaps, it may be called an ulcer, ſui generis. Singular in its nature to me, and equally ſurpriſing to many who ſaw it. Should it be aſked why did I keep the man ſo long on board, I anſwer he was not only willing to ſtay, but unwilling to go to an hoſpital, till he did go; and then required incentives, or would have been eaſily induced to ſtay, could I have flattered him any longer. My officers were pleaſed with my earneſtneſs; I ſhould have been leſs wiſe, I hope I may be able hereafter to add, and the public leſs profited. Theſe obſervations were at firſt intended for the Honourable Commiſſioners for Sick and Wounded Seamen; they have them it is true in my Journal, but in a more diffuſed ſtate. The war being over, I think they will be rendered more public by means of your work, to the ſurgeons of the Navy and to the Profeſſion at large. But to the Medical Board, at this time, they might not be ſo opportune. Moreover, I underſtand the late Dr. Johnſtone had received a ſample of the Zanthoxylon, with a much better account than I am able to furniſh.

James Pomeroy, ſeaman, about thirty years of age, by trade a ſail-maker, and uſually employed as ſuch on board, on the 4th of Auguſt, 1800, came to his Majeſty's ſhip Spencer from the Aquilon, juſt arrived from the Weſt Indies. I found him afflicted with ſeveral ſmall, ill-conditioned ulcers on the ſoles and ſides of the feet, and on one great toe. He told me he had been thus afflicted for ſeveral months, though occaſionally better; he had ſome ſuſpicion that jiggers were the exciting cauſe of the firſt ſore, but that others had taken place from time to time, in form of a ſmall bluiſh coloured veſicle; which thoſe who are experienced in true ſcurvy will correctly form an idea of, and may be beſt compared to vibices. It may be neceſſary to inform ſome, that the jigger is a ſmall inſect of the tropical climate, which thoſe who go bare foot are very liable to get inſinuated, gradually, very deep in the feet, forming to itſelf a nidus, creating a moſt painful ſore; for the cure of which, the removal of the animal is firſt neceſſary, and at this the blacks are very expert. Admitting ſuch to have been the occaſional cauſe, it was of very little conſequence to conſider that at preſent. On the whole, he had very gradually got into a deplorable ſtate, ſuffering conſtant pain, quite unable to ſtand, and his health undermined. From the appearance of the wounds, his general health and countenance, the nature and intolerable fœtor of the diſcharge, I conſidered the caſe to be completely ſcor-

butic. Accordingly, I gave him lemon juice, and applied lint compreſſes immerſed in the ſame acid twice a day to the ſores. This was continued till the 13th, when he took four ounces of the acid, with the ſame quantity of a mixture of bark, and repeated the dreſſings as before, till the 18th; he then took eight ounces of each till the 20th, when he omitted the bark, becauſe it purged him; but the acid was repeated in both ways, and I gave an opiate till the 27th, when pulv. cinchon. was applied to the ſores, and acid repeated as before.

Rep. ad 17th Sept. when all the ulcers began to ſkin over, and that very rapidly; very ſimilar to the ſkinning proceſs (very different from cicatrization) of a chancre, after the morbific action is deſtroyed by a cauſtic. R. Succ. limon. ℥xij. quotidie, et applic. pulv. cinchon. ulceribus. Antiſcorbutic diet.

R. ad 10th October, when I omitted all antiſcorbutics, and gave calomel, gr. ij. quotidie; applied ſimple dreſſings, and gave opium occaſionally, becauſe the ulcers were again at a ſtand, and very painful.

17th. Ulcers worſe; ſpread again, and very painful; feels weak from the calomel, which I omitted, and reſumed the former plan, dreſſing with powdered bark on the ſurface, and dry lint over; and taking a pint of lemon juice a day, till Jan. 4, 1801, when I dreſſed one foot with hydrarg. nitrat. and the other with bark.

7th. Omitted lemon juice, becauſe he had it, in form of a ſherbet, like the ſhip's company, with plenty of vegetables. But when lemon juice was preſcribed, it is to be underſtood, he took whatever quantity is expreſſed, unmixed; not exceeding half a pint for a doſe; and that he uſed to drink off with as much eaſe as water; and, I may add, with as little permanent benefit.

30th. R. u. a. et ſucc. lim. ℥iv quotidie. A more ſcorbutic appearance. Repeated to the middle of February, when one foot was healed, and continued well to 17th March; but the other gets a repeated ſloughing, or hardened collection of matter and dreſſings; on the removal of which, the ſores are found nearly as before. Dreſs with a ſolution of blue vitriol.

March the 18th. A ſcabby eruption, for ſome days, on the ſide of his noſe, not unlike herpetic ſcab, or rather like lepra; being whitiſh, brown, and incruſted; ſuch, he ſays, he has been accuſtomed to in warm weather. If he was not ſo poſitive of never having had the venereal diſeaſe, and did not mercury aggravate the ulcers, ſhould determine ſuch to be venereal; alſo round a healed ſore of one foot, ſome white ſcales come out firſt in form of tetter.

April

April the 10th. One foot continues quite well, the other nearly ſtationary; to aſſiſt which, applied adheſive ſtraps, and continued the ſame general tonic method to the 13th of May, when, for the firſt time, I applied pulv. cortic. Zanthoxylon twice a day to the ſurface of the ſores, and over it dry lint. 18th. Ulcers certainly improved they contract and dry, without granulation, as the others did, after the manner of chancre. 20th. One ulcer that lately broke out is well again, the other (for they are now reduced to one) has a florid, ſolid, and healthy appearance, which it never has had before. R. pulv. zanthox. N. B. He has not taken lemon juice, or other medicine, ſince he began the Zanthox. ſo that its action is totally unaſſiſted, except by a ſimple nutritious diet; and that he has never been without; he generally had freſh beef every day, plenty of vegetables, and always a pint of wine, tea, ſago, chocolate, &c. 24th. Much better, drying, hard and fair, but by contraction has cauſed a painful tightneſs of ſurrrounding integuments, with ſome inflammation. R. ad ʒi, when not near ſo well; the florid-coloured granulations, or rather ſurface, has diſappeared; diſcharge thin, and acrid; much pain, ſurrounding redneſs, and ſenſibility. Omit the Zanthox.; apply ſimple dreſſing till the 3d of June, when he went to Plymouth Hoſpital. Mr. Fuge, firſt ſurgeon of that eſtabliſhment, has favored me with an account of what was done for him there, though without avail, till recourſe was had again to the Zanthox. with the quick, powerful, and permanently good effects of which he was very agreeably ſurprized, and was deciſive, in his opinion, that he owed his cure to the operation of that medicine, which it performed in three or four dreſſings; not by a gradual formation of cicatrix, after being brought to a level by granulations, but by cleanſing and coming to a ſmooth red ſurface, very much like the look of a part from which you have recently removed the cuticle after a phlegmon, and healing by a proceſs of ſkinning, like recent bliſter or chancre.

Whilſt in the hoſpital he had a little of that encruſtation on one noſtril, of which I have before ſpoken; it was always trifling in its appearance, and without pain or inconvenience; was never complained of by him, and might have paſſed unnoticed by any one who was not intereſted in ſeeking for any probable developement of the cauſe and nature of his infirmity; nothing was ever applied to it. Of the ſame apparent inſignificance, was a little interruption of ſpeech, ſomething like liſping and faltering of the tongue; this I had thought little of, except as an organic fault, or as the effect of habit; but there is reaſon to think it a degree of diſeaſe, from the circumſtance of a partial paralyſis of one arm, which came on ſuddenly a week

week or so after the healing of the wound; and the impediment of speech increased at the same time. By stimulants, however, he got the better of these complaints, so far as to be discharged from the hospital, after being in it about three months; not able to walk, or stand firm, without the aid of crutches; which is not to be wondered at when we consider the pernicious effects of inaction on the system at large, which was very much enervated, and on the lower extremities in particular, which he had not used for near eighteen months, generally going about on his hands and knees, or podex.

The muscles of the legs (tho' well formed, as was his frame in general) were quite flabby, the ancle joints so weakened, and he had so little command of the flexor and extensor tendons, that on lifting the feet from a point of support, they would tremble incessantly, and very quick, which he had not the least power to restrain; they shook as if they were hung on wires; this being considered, it is more to be wondered at he got on so fast. He then being desirous of going to his friends, Mr. Fuge very kindly promoted his being invalided. His wound remained well, and he was recovering, though slowly, the use of his limbs, and a restoration of tone in the system, which had been so long, as also his appetite, delicate and weak, more like a fashionable lady than a sailor. Neither at the time of his paralytic affection, nor since, have I had an opportunity of questioning him relative to his imperfection of speech, which it may be necessary to observe was not always alike, and was much worse, two or three times, when he had taken a glass of wine extraordinary. I dwell upon these circumstances, to shew the atony of the system; and the fitness of the method of cure, by tonics and stimulants, proved to be adapted to his general health, and to the particular atonic state of the ulcers and the morbid action so long entertained there; if that can be considered action, whose very essence consisted in inaction, confirmed by long habit, which the whole train of irritants was unable to rouse, or alter for the better. Though I could give a great deal of pain by such means, and enlarge the wound by sloughings and eschars, I never could produce inflammation, correctly speaking, nor that healthy degree of it so essential in such cases, until I applied the Zanthoxylon. Such action, it is to be observed, had been induced a few days before I sent him to the Hospital, though it again took an unfavourable turn, which, with all circumstances considered, and the expectation of the ship going abroad, made me decide on removing him; though it is more than probable I should soon have succeeded in his

cure

cure on board, yet it may be right to attribute ſomething to change of place, mode of life, and ſtate of mind.

It may be alleged, I ſucceeded in curing ſeveral of the ſmaller ulcers, and one foot entirely; but the ſmaller ones were of conſiderable leſs duration; the one which remained was of the longeſt, was larger, deeper, worſe conditioned, and worſt ſituated; in the centre of the ſole, and according to a law which frequently applies, the action which was before divided, appeared to be here collected; it was occaſionally much worſe, but never better; till at the laſt, than before the healing of the others; beſides as it held out the longeſt, the force of habit may alſo explain the inefficacy of long continued means; and though as in diſeaſes of ſome characters, you preſerve the principle of action, you vary the agents; as we often find a good account in changing from bark, to bitters, ſteel, &c. All the uſual means had failed; they had had a long and fair trial, and though I will not go ſo far as to ſay a cure could not have been obtained by perſevering in them, or that ſomething elſe might not have been found efficacious; yet it is plain that ſomething new was deſirable; happily for the patient, and ſatisfactory to me, therefore was the deſideratum found in the Zanthoxylon; which beſides its general qualities, I ſee no greater difficulty in admitting as a ſpecific, in certain caſes of ulcer, than to admit bark for intermittents, or mercury for lues; if it is not proved that they are the ſine qua non, perhaps it may be admitted that they are the beſt, and that they are ſufficient antidotes. I may be aſked, What are thoſe certain caſes of ulcer? I am puzzled to deſcribe even the one in queſtion. It was never larger than a ſhilling, for months not bigger than a ſixpence; about the eighth of an inch deep, thin ragged edges, like a margin of black ſkin falling down on the ſurface, as often renewed as removed; ſurface honeycombed, livid, with a thin, acrid, fœtid, diſcharge; at other times nearly filled up, fair, almoſt dry, gathering a ſcab, which was renewed as often as removed; diſcloſing the ſore exactly in the ſame ſtate every day, for a month or two. But I think the beſt indication for the uſe of the medicine is, in all caſes, where the uſual practice has failed, where there is no diſeaſe of bone, or any thing acting as an extraneous body; nor any virus in the ſyſtem. Even in theſe caſes, though it cannot effect a cure, it may anſwer many good purpoſes, and appears worthy of extenſive experiment.

This treatment in the hoſpital conſiſted, firſt, in a liberal uſe of bark, with porter, and nutritious diet, and opium occaſionally. 6th June, he had boluſes of calomel and antimony. 7th, Having a ſlight attack of fever, he had a febrifuge mixture, with camphor, &c. with porter, wine, and a pill of calomel.

calomel, gr. iij. and opium gr. ij. which was continued to the 12th, with the addition on the 10th, of a ſtrong decoction of bark, ℔ſs. in which ʒſs of ſtrained opium was diſſolved: this was uſed as a lotion to the ulcer; the camphorated mixture and opium were reſumed till the 15th. — 16th he began a free uſe of bark and opium till the 17th July, with porter, wine, &c.; then a liniment of linim. ſapon ʒiij. and tinct. cantharid. ʒj was applied to the margin of the ulcer, and the former treatment of bark, &c. repeated to the 1ſt of Auguſt, when a bliſter was applied near the ſeat of the ulcer, which was repeated on the 9th, bark, opium, wine, and porter being continued to the 16th, when he took a mixture of pulv. and tinct. cinchon. and the tinct. canth. was locally repeated. Purgatives had been occaſionally adminiſtered, and as yet not the leaſt ſalutary change induced; the ulcer larger, ſloughy, and without action, though exceſſively painful: a ſolution of argent. nitrat. was then applied, with no other effect than producing a large eſchar, which was repeatedly produced, but no diſpoſition to ſalutary action induced; nearly as if it had acted on dead matter: then ſucceeded the yeaſt poultice, which cleanſed off the remains of ſloughs, but left a ragged, dark-coloured ulcer, on which an ointment with hydrarg. nit. did nothing. I then mentioned to Mr. Fuge the flattering character I had received of the Zanthoxylon in obſtinate ulcers in particular; and the good effect, though tranſient, it had had on Pomeroy, juſt before I ſent him on ſhore; as alſo in cleanſing ſeveral other ulcers, and partly diminiſhing their ſize, though incapable of cure by ſuch means, from Necroſis; which were ſent home, under my care, in the ſame voyage from the Weſt Indies. Mr. Fuge had read of the virtues of the medicine, and met my propoſal for its trial in a very friendly manner: I accordingly ſupplied him with ſome of the bark, which was applied under his immediate inſpection; and to his great ſurpriſe, poſitively performed a cure by covering the ſurface of the ulcer three or four times with the powder of the ſame; and without any other aſſiſtance. I mentioned to Mr. Fuge my intention of publiſhing the caſe, which he joined with me in thinking worthy of public notice, and very politely furniſhed me with the preceding account of his hoſpital treatment. Why it did not cure him when uſed on board might be owing to my ſuſpending its uſe too ſoon, on account of its powerful excitement, and the inflammation it induced: perhaps it was even right to omit its uſe for a few days for that reaſon; and I doubt not, had I then reſumed its application, he would have been cured; but all circumſtances conſidered, I thought it right not to loſe the opportunity which offered of ſending him to the hoſpital. His

caſe

case had often been shown, while on board, to several medical men, who, not informed of its peculiarity, looked on it with indifference—as a mere nothing. "Oh! that will soon be well," till they were informed of its history, which it required no small share of confidence to believe. Its usual appearance was indeed so trifling, that without such information, those in power could not have adjudged him an object for the hospital, nor the gentlemen of that establishment admitted him, had not his case been stated. I believe then his cure, with the assistance of good diet, and the privation of the inconveniencies (to say the least of them) of a sea life, was thought to be no difficult matter, and at first excited little more attention than a simple case, till ocular demonstration impressed on their minds the singularity both of the case and its cure.

Oct. 11, 1082. G. BELLAMY, M. D.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

MANY judicious and pertinent observations have appeared in several Numbers of your respectable Journal, on the baneful and ignoble practice of Quackery; but I have not observed any plan proposed by those correspondents for its entire suppression, or cause assigned for the encouragement it has met with in this country *particularly*.

Having repeatedly witnessed the injurious effects of several nostrums daily recommended in the papers, as curative of every disease incident to the human frame; the subject has since appeared to me of so great importance, as to induce me to devote much time to the investigation, not only of their compositions, but the abilities of the proprietors, and the testimonies published of their efficacy, the result of which I purpose laying before the public, in a Treatise, entitled, "An Analysis of Quack Medicines, comprising a faithful account of every advertised medicine sold in the united kingdom, the names of the proprietors, their education and origin, the testimonies of cures and authenticated cases, of their baneful effects, &c." In which I shall satisfactorily prove, that this practice is the greatest imposition ever practised in any enlightened country. Many of these *wonderful discoveries* I find to be pharmaceutical preparations sold under a fictitious name, as the balsam or essence of some celebrated herb or medicine. Surely, if impositions are cognizable by our