A concise relation of the effects of an extraordinary styptic, lately discovered: in a series of letters from several gentlemen of the Faculty to Barth. Ruspini.

Contributors

Ruspini Bartholomew, 1728-1813. Royal College of Physicians of Edinburgh

Publication/Creation

London: printed for J. Johnson, and G Kearsley, 1785.

Persistent URL

https://wellcomecollection.org/works/yz88bp3g

Provider

Royal College of Physicians Edinburgh

License and attribution

This material has been provided by This material has been provided by the Royal College of Physicians of Edinburgh. The original may be consulted at the Royal College of Physicians of Edinburgh. where the originals may be consulted.

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org

ACONCISE

RELATION

OF THE

EFFECTS

OF AN EXTRAORDINARY

STYPTIC,

LATELY DISCOVERED:

IN A

SERIES OF LETTERS

FROM

Several GENTLEMEN of the FACULTY,

TO

BARTH. RUSPINI, SURGEON DENTIST.

LONDON:

Printed for J. JOHNSTONE, St. PAUL'S CHURCH-YARD, and G. KEARSLEY, JOHNSON'S HEAD, FLEET-STREET.

M,DCC,LXXXV.

R40610

INTRODUCTION.

ACCIDENT, some time since in the pursuit of a very different object, put me in possession of the extraordinary powers of the Medicine, which is the subject of the following Letters.

I have for a short time past made use of it myself in cases where the small blood vessels in the human body have been accidentally opened; the pain of which is not only instantly mitigated, but stopped the A effusion

effusion of blood in the most speedy and effectual manner.

A Gentleman, who is not more distinguished by his exalted station, than by his profound knowledge in the most useful branches of Philofophy and Medicine, to whom I prefented a few ounces of the Solution, found fimilar proofs of its efficacy in two cases. The one, when a servant had separated the blood vessels at the wrists by a fall, in which he received a large wound from the bottom of a broken bottle; and the other, from a wound made with a razor, through the external jugular, by an unhappy person who was infane.

fane. In this last case, which happened some distance from town, the
effusion, which sprung out with the
greatest rapidity, was instantly
stopped by a pledgit dipped in the
liquid; and no medical gentleman
arriving till several hours after, the
wound was found perfectly closed,
and needed no other application.

Struck with the singular benefit such a styptic would prove to the publick, in case it could be brought into general use, I applied to a number of gentlemen of experience in the profession of Physic and Surgery, to make a fair trial of the Medicine, and favour me with a A 2 particular

particular and impartial account of its effects. This gave rife to the following communications, which I have published without the least alterations, according to the order in which they are dated.

to exided the Laborat to a

Total sword farmer list envisor

DEAR SIR,

The enclosed contains a faithful account of the trials made with your Styptic Solution, by Mr. FARMER, and

Your affectionate fervant,

WILL. FRED. GLOVER.

EXPERIMENT I.

ON the 26th of July, 1784, a large strong calf about four months old, weighing near twenty-two stone, was properly fixed for the operation, when after removing the integuments on the inside of the animal's thigh, I laid the femoral artery bare, in the presence of Mr. Farmer, a respectable medical practitioner, Mr. Ruspini, and some other gentlemen, whose curiosity was excited

excited by the character given of the styp; tic, to see a proof of its effects. The gentlemen all felt the pulfation of the veffel, which was full and flow .- I then made an incision quite through the artery down to the bone, when the blood flew rapidly out of the wound. On a piece of lint dipped in the styptic water being applied and held on the mouth of the veffel about two minutes, the hæmorrhage stopped; but appearing foon after to ouze from under the lint, a fresh dossil moistened as the former was laid upon it without pressure, and all appearance of bleeding directly ceased .-A slight bandage, far from being tight, was then rolled over the wound, and the animal having struggled considerably, was left tied down on the table.

Three hours after we returned to examine the wound. The calf had in our absence got his legs loose and had tore off the bandage;

dage; no kind of hæmorrhage however had followed, and on inspecting the incision, the extremities of the semoral artery were closed, and a small portion of coaguated blood lay round them.

A pledgit of dry lint was then tied on the wound with a piece of list, but not so tight as to compress the vessel; the creature was then suffered to walk about the slaughter-house yard, and we left him.

The next day I heard, soon after we went from the house, the creature had got off the dressing, but no blood issued.—On inspecting the wound this day, a very small quantity of a thin ichor was perceived in the cavity. The day after, the calf seemed perfectly easy, and the wound appeared in a healthy state. Being satisfied with the success of this experiment, I saw the animal no more.

4

EXPERIMENT II.

ON the 29th of October, Mr. Farmer and myfelf, with Mr. Wellbank, a young gentleman, pupil to Mr. Sheldon, the ingenious lecturer on anatomy, opened the femoral artery of a strong spaniel, about twelve months old. The styptic was directly applied, and only pressed on the orifice of the vessel for about thirty seconds, when the bleeding entirely stopped. A small roller was wound round the limb, but not so tight as to compress the artery. A good digestion succeeded, and the dog was perfectly well in a few days.

EXPERIMENT III.

O N the 10th of November, we laid bare the femoral artery of a strong hog about fourteen months old, and divided it with a bistory. A pledgit of lint dipped in the styptic was laid on the wound, and the animal struggling frequently, the hæmorrhage did not stop till near three minutes. The thigh of the creature was bound up with a roller as mentioned in the last Case; but when he was turned into a stable where some straw was spread for him to lie on, he in a few minutes rubbed off the bandage; notwithstanding which, no blood followed. The wound cicatrized in a few days, and the animal continued well for feveral months after.

B

EXPERIMENT IV.

ON the 19th of November, 1784, the above-mentioned gentlemen having, with other affistance, secured a strong old gelding, which from an accident had beed devoted to the hounds; after expofing the crural artery, which beat distinctly fifty-two strokes in the minute, I made an incision quite through the vessel down to the femur, when a large stream of blood iffued, and on the lint dipped in the styptic being applied as usual, and kept on for about a minute by Mr. Wellbank with his finger, on taking it from the pledgit, the hæmorrhage appeared to be entirely restrained, and no fluid iffued, for upwards of nine minutes, from the wound, when the animal making a very violent effort, broke the ligatures by which he was fastened, and the blood started out very profusely. It was with great difficulty the horse was caught by the attendants; and on the styptic being applied again, the blood stopped as before; but in a few seconds he appeared agitated to a great degree, and by some forcible struggles broke the ligatures a second time, and threw off the lint. An indispensible engagement prevented us at that period from making any farther trials; and the owner of the animal a short time after ordered him to be knocked on the head.

To B. Ruspini, Esq. Pall-mall.

The following is from my honoured Friend Sir James Leake.

Southgate, Thursday, Sep. 23, 1784.

DEAR SIR,

AT the defire of Messrs. Hammond, I have the pleasure to inform you B 2 that that a trial of your styptic has been made this evening with very great success in the presence of those who have subscribed their names hereto.

The operation was performed by Mr. William Hammond, on a very fine healthy calf weighing above twenty stone, and which had been bled only once, about a fortnight ago. The leg was taken off just above the hock, and the styptic applied immediately: The time between the operation and application of the styptic, the blood that appeared to have come from the calf feemed to be about four ounces; the calf making a sudden effort, tore off the dreffing, and it bled afresh with much violence. On the fecond application of the styptic, the blood was as foon stopped as before; and in about thirty-five minutes the dreffing was taken off, and not the least fign of bleeding was observed. The opening of the large artery we saw with a magnifying glass was quite obliterated, and no signs of inflamation appeared. At the time the dressing was removed, the pulsation of the artery evidently appeared very strong, and notwithstanding all the struggling of the calf when it was killed, there was no appearance of bleeding from the dissected part. All here unite in best compliments to you, and wish that you had been present to see the effects of this styptic, which we hope may be of as much service to mankind as the trial made of it seems to promise.

I am, dear Sir,

Your's, very fincerely,

JAMES LEAKE,

Francis Altieri,
John Hammond, Surgeon,
William Hammond, Surgeon,
Thomas Hammond, Surgeon.

To B. Ruspini, Efq.

The following is the refult of the trials made by Mr. JUSTAMOND, Surgeon to the Westminster Hospital.

QUEEN ANN-STREET, EAST, Feb. 12, 1785. DEAR SIR,

MANKIND is so much interested in the discovery of a styptic which may preclude the necessity of the ligature, and the art of furgery would receive so effential an improvement from it, that it was with the utmost readiness I complied with your request, in making some experiments with an application of this kind, the utility of which in stopping hæmorrhages, had been previously testified to me from very respectable authority. You, very candidly, refolved not to make any thing public respecting this matter, till various trials, made in different ways, by different perfons, and in places distant from each other, had all concurred in afcertaining the styptic property of your liquid. Among the rest, I beg leave to present you with the result of those

those experiments which I made for the purpose of trying its effect.

The first experiment was instituted in the presence of Mr. Glover, Mr. Farmer, Mr. Boys, yourself, and several other Gentlemen, upon a large strong calf about two months old; I made an incision on the infide of the thigh, high up towards the groin, and carefully diffected down to the femoral artery, which I opened. The hæmorrhage was profuse, and a piece of lint well imbrued in the liquid was applied to the artery, and kept there for a few minutes with the finger; in the mean while, the liquid was applied to feveral of the collateral branches, which bled very freely. In a short time the finger was removed, notwithstanding which no blood appeared to issue either from the trunk, or the collateral branches. The calf foon after began to struggle violently, in consequence

of which the blood flowed again from the trunk, but not fo full a stream as before: A repeated application of the liquid appeared evidently to restrain this fresh bleeding almost instantly; and when the struggles were renewed, and the hæmorrhages with them, the liquid was often tried with the fame fuccess. We staid, obferving the calf, full half an hour before the hæmorrhages were entirely stopped; the calf was then let loofe and left to itself, the wound having been previously covered with lint wet with the liquid, and flightly bound on the part. The same evening the calf was perfectly well, little or no hæmorrhages having taken place; and the next morning, though the calf had walked about the room, yet he was in full health and vigour, the furface of the wound, though uncovered, shewed no figns of blood. It was thought unnecessary to keep the calf alive any longer.

In our next experiment, we resolved to proceed in a different manner, and to amputate the limb completely. This was done by dividing the crural artery above the knee-joint, and by taking the limb off at the joint, in order to make a wound of a larger surface, that might furnish as fair a trial as possible for the styptic: the calf was about a fortnight younger than the former.

The limb being removed, the styptic was applied as before, and kept on the artery with the singer for a short time. The experiment seemed to succeed more speedily in this instance than in the former; for although the lint and styptic were not retained by any kind of bandage, yet the hæmorrhage was sooner stopped, and the animal sooner left to itself. This calf was kept alive till the fourth day, during all which time no hæmorrhage intervened, and

when the animal was killed, the wound was in a fair state of suppuration.

Still, Sir, I expressed my doubts to you, that these experiments, however satisfactory they might appear, would not be deemed conclusive.

I urged that the contractile force of the arteries in quadrupeds, might possibly be greater than in the human species; and I was the more inclined to this opinion, from having observed that many experiments had been successfully made with styptics upon quadrupeds, which when repeated upon man, had notoriously failed. Upon this principle it might be argued, that the same effect would have taken place whether the styptic had been used or not, that the hæmorrhage would equally have been restrained, and that the animals would equally have lived. In order to confirm

or invalidate this objection, and to afcertain whether the liquid had really any power of stopping hæmorrhages or not; I proposed that the amputation should be. performed in the fame manner upon another calf nearly of the same age, and that we should try what the event would be when none of the liquid was used. This you readily affented to, and it was accordingly done. After the operation I kept fome dry lint pressed upon the bleeding vessels, for a longer time even than I had kept the styptic in the former instances. The hæmorrhage fometimes appeared to be checked, but never stopped, as in the other trials with the liquid, and returned with as much violence as ever. The calf died in about an hour and a half after the operation.

From the striking difference in the event, we cannot but draw the strongest C 2 conclusions

conclusions in favour of the styptic; at any rate it must be acknowled, that the powers of it in restraining hæmorshages are very great, such as we know not in any other styptic, and such as make it a very valuable acquisition to surgery. But I meant not to expatiate upon the utility and importance of the liquid; I only meant to give you a plain account of facts, of which you may make what use you think proper.

I am, dear Sir,

Your most obedient, and most humble Servant,

Jo. JUSTAMOND.

The following are from Mr. Boys, Surgeon, in Berners-Street.

MY DEAR SIR,

THE very great and uniform fuccess which has attended the various experiments riments we have made with your Styptic Water, has, in my opinion, reduced the efficiency of its restringent properties on the arterial blood of animals, to a certainty.

Confidering myself interested for a discovery of such an immense utility, not only as a professional man in particular, but as an individual desirous of promoting the good and happiness of society at large; I think it absolutely incumbent on me to give you my testimony, in order to promulgate as much as possible the good effects of which I have been a material witness.

The operations have been already fully explained by Mr. Justamond; I therefore need only concur in the general facts so properly advanced by him, and add, the appearance of the wound afterwards, which

came immediately under my fole inspec-

The second day after the operation, the animal seemed entirely free from pain; on examining the wound attentively, not the least tendency to inflammation appeared, but the whole surface of the limb looked florid, and was in a state of perfect suppuration.

Much has been faid heretofore of the power of medicines to stop blood, but the inesticacy of some, and the corrosive quality of others, have ever precluded the use of them; your Styptic, by obviating both the objections, bids fair to become of general benefit to mankind; in bleeding I always made use of it, and have regularly found, by applying a little lint imbrued in the water, and held on the wound for a few seconds, that the blood has been entirely

tirely restrained, and the bandage rendered unnecessary.

These, my dear Sir, are circumstances in favour of your discovery, confirmed by my own practice and observation. I therefore sincerely hope you will make it public.

I am, dear Sir,

Yours, &c.

JOHN BOYS.

DEAR SIR,

PERMIT me to communicate to you some circumstances which came to my knowledge relative to your medicinal water, and which set its Styptic power in a fuller point of view than we had before seen; feen; for although perfectly fatisfied with its efficacy in all our experiments, yet the very diseased state of the last calf at the time of the operation, and which could not be known till after its death, ranks it still higher in my estimation.

Convinced by the observations I had made in a preceding case, of the mildness of the liquid, and its virtues as an antiphlogistic, I did not see the animal till the sourth day after the operation, when I took with me a medical friend to shew him the wound to which your Styptic had been applied.

I was then informed by the man who had opened the calf, of something unufual in its inside. I examined the parts, and found the liver had adhered to the abdominal muscles in its concave part, and

in a large sebaceous gland, was an encysted tumor filled with a greenish pus, and the small intestines were highly inflamed.

From these appearances it follows, that the animal at the time of the operation, must have been in a state of inflammation, and of course, as the blood must have circulated with greater velocity than in the healthy animal, the power of the repellent proves itself in an equal proportion.

I am, my dear Sir,

Your most faithful,

March 3, 1785,

Humble Servant,

JOHN BOYS.

To B. Ruspini, Esq.

From Doctor WALSH.

DEAR SIR,

AS the last time you did me the honour of a visit, you expressed a desire of knowing my fentiments relative to the Styptic you have lately discovered; I must freely confess to you, that being myself rather prejudiced against such remedies, I was at first not a little surprized at the apparently powerful effects which feemed to refult from its application, and make no doubt, but if a repetition of the experiments should confirm its success, it may be found extremely useful in many urgent cases; for though the improved mode of amputating in a great measure excludes the introduction of extraneous bodies within the lips of the wound, and of course that of the lint necessary for absorbing and retaining this fluid, yet in cases of offification

tion of the arteries, an occurrence, though perplexing, not unfrequent, whose ligatures are often ineffectual, as well as in sleets and armies, where a sufficient number of tournequets are wanting, and the medical men too sew to afford instant relief to all the wounded, it may often be the means of preventing a sudden dissolution, independent of what is to be expected from it in situations of a less urgent nature.

I am, Sir,

Your obedient, humble Servant,

GREAT QUEEN.STREET,

March 15, 1785.

B. WALSH.

B. Ruspini, Efq.

The following from T. OGLE, Efq.

DEAR SIR,

I have the pleasure of acquainting you that I am of opinion, as far as I have D 2 feen seen, your Styptic will answer your warmest wishes.

The first experiment on the calf, which I saw some hours after the amputation, gave me much confidence of its utility. The animal was not sufficiently secured; his hind leg being totally at liberty, was certainly attempting to get upon his legs, and of course forcibly struck the stump against the sloor. The bandages were entirely off, but no blood issued from the arteries.

The bleeding from the aperture in the carotid artery of the dogs being so totally stopped by the medicine, was an additional proof of its efficacy. I lamented my absence the next day from indisposition, but was glad to find the medicine was, for necessity, obliged to be used in that experiment. I shall be very happy to give your

your remedy every trial in my practice and, shall be more happy if I have it in my power to congratulate you, and mankind at large, of its certainty and positive efficacy from my own experience.

I am, dear Sir,

Your most obedient Servant,

CROSBY-SQUARE,
April 4, 1785.

T. OGLE.

B. Ruspini, Esq.

From Mr. KENNEDY, Surgeon,

DEAR SIR,

AS you expressed a desire the last time I had the pleasure of seeing you, to know my opinion on the Styptic which you have lately discovered; hitherto I confess I was much prejudiced against such remedies, remedies, but now acknowledge myself in some degree a convert, being persectly astonished at the powerful effects produced from its application, and am strongly of opinion, that every suture experiment will tend to illustrate its great utility and power beyond a doubt; that it will be found a most powerful remedy in a variety of hamorrhages, and infinitely more so than any now made use of. I think the experiments already made should be published, on that and other matters relative to the subject. I shall have the satisfaction of giving you my opinion more sully when I have the honour of seeing you.

Believe me to be, with great esteem, Your most obedient,

Humble Servant,

GREAT QUEEN-STREET,

April 9, 1785.

M. H. KENNEDY.

B. RUSPINI, Efq.

Second

Second Letter from Mr. Boys.

DEAR SIR,

'T I S with pleasure I can again affirm the power your medical water has in stopping fluxes of blood; however powerful its circulatory force may be, indeed in every experiment I have made and feen (and they have been many) its fuccess has been uniform. From accurately inveftigating its modus operandi, it does not appear to me, that there is any visible contraction of the part to which it is applied; or that it at all acts, as most known Styptics do, by lessening the diameter of a veffel by their aftringency. Your medical water, on the contrary, produces no apparent effect on the wound, it gives no pain, but seems by a sedative property to ease it; in confirmation of this, I shall set before you a brief account of an an amputation

I performed, where, during its cure, the only application was the water.

A half grown pig was confined on a table by proper bandages, and as the animal was intended to exhibit a living example of the power of the water, I took all possible care in performing the operation; the part fixed on was a hind leg, and as high up as the joint would give me leave; there, in in the sleshy substance of the thigh the limb was cut off.

The blood bursted out of the semoral artery with amazing velocity, but on immediately applying a pledgit of lint dipped in the liquid, it was entirely restrained, and the pig who struggled before, was quiet and silent; I held it on the wound about three minutes, when the bandage that confined his head was loosened, and by the carelessness of the assistants,

fo much, that he got off the table, and ran into the corner of the room; of course the pledgit fell off, when instead of seeing a torrent of blood flowing from the wound, I did not perceive one drop; in short, it bled no more. No bandage or ointment whatever was applied, and in about three weeks the fore was well.

I am, dear Sir,

Yours, most truly,

BERNERS-STREET, April 10, 1785.

JOHN BOYS.

N. B. The quantity of water used in the operation did not exceed three drachms.

To BART. RUSPINI, Efq.

Letter from JOHN SHELDON, Esq. F.R.S.

Letter from JOHN SHELDON, Esq. F.R.S.

Letter from JOHN SHELDON, Esq. F.R.S.

Royal Accademy.

DEAR SIR,

AS you are desirous that I should give you my opinion respecting your styptic liquid, with which I have made two experiments some short time since, I take this opportunity of complying with your request, and beg pardon for not doing it before, but hope your goodness will excuse it, as I have been of late very much engaged.

EXPERIMENT I.

A full grown dog of a middle fize being properly secured, I laid bare the trunk of the left carotid artery, separating the vessel from the eight pair of nerves and intercorals;

rals; I next made a puncture in the main trunk of the artery, when the blood was feen to issue freely from the arterial trunk by several of the by-standers, (who were most of them medical people.) I applied fome of the flyptic liquor upon lint, by foaking the lint in a faucer filled with the flyptic fluid, and placed it upon the puncture in the artery, then applied other dossils foaked in the fluid upon the first doffil that was laid on the artery. The bleeding appeared to be stopped as soon as the styptic liquor was applied. Dry lint was placed over these dossils, and a bandage was rolled round the dog's neck, by which a moderate pressure was made sufficient to retain the dreffings. This animal never bled after the application of the styptic liquor during the operation, nor during the course of the cure, and is now perfectly healed.

This experiment was made at Mr. Rufpini's house in Pall-mall, on Wednesday,
the 23d of March, in the presence of Dr.
Kennedy, Dr. Walsh, Mr. Tomkins, Mr.
Ogle, Mr. Kennedy, Mr. Glover, Mr.
Farmer, Mr. Justamond, Mr. Boys, Mr. John
Welbank, surgeons; William Addington,
Esq. and several other gentlemen distinguished by their rank and abilities.

EXPERIMENT II.

Made 24th March, 1785.

In another dog full grown, but not quite fo large as the former, the left carotid trunk was opened by a lancet, as in the preceding experiment, except that the puncture was rather larger, and the blood issued with great impetuosity; the hæmorrhage was stopped almost immediately by the application of the styptic liquor, and the dressings which were made use of, were the same as

in the former experiment. The dog did not bleed till five days after the operation, and this hæmorrhage was owing to his fcratching the wound with his paws, by which means he loft a great quantity of blood before it was perceived; the dog died the day after he had produced the bleeding by irritating the wound. It was however observed that the second bleeding was stopped as soon as the styptic was applied; and there is no doubt but that the dog perished in consequence of the great quantity of blood loft in the fecond hæmorrhage. The same gentlemen before mentioned were present at the second experiment, with Mr. Birch, furgeon to St. Thomas's Hospital. I am therefore of opinion that this liquor is a powerful styptic, and may be of confiderable utility in stopping hæmorrhages upon furfaces, or in cases of furgery where we cannot get at the arteries to tye them; as for example, in lithotomy, thotomy, in the operation for the fiftula in ano, and in many other occasions.

I remain,

Dear Sir,

Your humble Servant,

John Sheldon.

P. S. This liquid would certainly prove of confiderable utility in the army and navy service, and in many families who cannot have immediate medical affistance, from being placed at a considerable distance from a surgeon or apothecary.

GREAT QUEEN-STREET,
April 11, 1685,

To B. RUSPINI, Efq.

Second Letter from Mr. JUSTAMOND.

DEAR SIR,

I N addition to the account I have already fent you of the feveral experiments I have made with your styptic on the large arteries of quadrupeds, I now communicate what I have observed of its effects upon the human body. The opportunities that have occurred of trying it, have been only two; the first was in the temporal artery, just above the ear, which I was obliged to divide in removing a portion of the scalp, previous to the application of the trefine for a fracture of the scull. The artery in this patient was very large, and the stream of blood issuing from it very rapid, and of confiderable diameter, infomuch that I thought it a fair opportunity of trying the effect of the styptic, some of which I had in the hospital. I dipped a small portion of lint in it, and applying it to the divided artery, directed the house surgeon to hold it on slightly with his singer, while I proceeded with the operation. In a very sew minutes he removed his singer, and the hæmorrhage was completely stopped, nor did it return during the rest of the operation, which lasted some time, on account of the necessity there was of making personations in the cranium.

It may perhaps be observed, that the arteries of the scalp usually stop of themselves, or upon the application of dry lint with a slight pressure; this is true in general, but still every one knows, that in removing the scalp previous to the perforation of the scull, the size of the artery is so various in different persons, that we are sometimes obliged to secure them with the needle before we can proceed in our operation. As far as I can judge, the artery in this

this instance appeared to be one of that size which it would have been necessary to tie, if your styptic had not been used. Besides, the effect was so speedy in this instance, in stopping a considerable stream of blood, that I could not but attribute it to the power of the liquid, for it appeard to me that no such effect could have been brought about in so short a space, either by the natural contraction of the artery, or by pressure, unless it had been continued for a longer time.

The next instance I tried it in, was, in an amputation, below the knee, of the leg of astrong muscular man, at the Westminster hospital, in the presence of a great number of persons. After the removal of the leg, I applied dossils of lint dipped in the liquid, to the large arteries which bled very freely. I held them on for the space of five or six minutes, after which I began gradually and

and carefully to foften the tourniquet. The hæmorrhage appeared evidently to be restrained, though not entirely stopped; for the blood, which feemed to collect from various small vessels of the stump, only fell down in drops, and those not very frequent, from the most depending part. When the tourniquet was quite loofe, these drops for a time did not fall faster or thicker, but feemed indeed to be less frequent, so that we had some expectation of being able to trust entirely to the application. But after waiting some time, as this dropping still remained, and the man had had a previous mortification in the limb, and was therefore unable to bear even a small accidental lofs of blood, fo well as a patient under other circumstances might have done, I thought it prudent not to risque the matter, but removed the dossils, and so tied up the veffels. Upon taking away the doffils, it was a circumstance proper to be remarked, that that one of the large branches, the anterier tibial artery, appeared perfectly closed, and though excited to bleed by moving the end of it to and fro with the finger, yet it did not yield any blood.

I am, dear Sir,

Your very humble Servant,

J. Justamond.

April 5, 1785.

Letter from Mr. WELBANK, Surgeon.

May 10, 1785.

SIR,

IT is with pleasure I communicate to you a case of an hæmorrhage from the nose, in which the application of your styptic solution was attended with success. Thomas Agland, servant to Mr. Moore, at the sign of the Friar, in Black-Friars,

was taken with a bleeding at the nose, about ten o'clock on Monday night, which continued the whole night, and until half past seven this morning, when I saw him, and directly introduced a small piece of lint, dipt in your solution, up the nostril, on which the hæmorrhage immediately ceased.

I am, with great respect, Sir,

Your humble Servant,

No. 4, EARL-STREET, BLACK-FRIARS.

J. WELBANK.

THE END.

ERRATA.

Page 26, line 7, dele the words, freely, to you, myfelf.

10, dele, feemed to

11, for refult, read refulted.

27, 2, for whose, read where.

For the fignature, B. Walsh, read, P. P. Walsh.

34, last line but one, after the word artery, read, and separated the vessel, from the eighth pair of nerves and intercortal nerve on the same side.

35, line 1, and 2, dele, main trunk of the; and after artery, add, from whence, &c.

40 last line but one, for our, read, the