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MEDICAL STAFF.

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METHOD

OF TREATING

GUNSHOT WOUNDS.

BY

JOHN RANBY,

Principal SERJEANT SURGEON to His MAJESTY, and F. R. S.

LONDON:

Printed for John and PAUL KNAPTON, in Ludgate-street. MDCCXLIV.

MEDICAL STAFIS TIBE ARY. CONSHOT WOUNDS. THO HIN RANBY of Majestrand E. R. S.

KING.

SIR,

possible Humility, to approach Your Royal Presence, not with a Panegyric on Your Great Actions, but with my Sentiments on an interesting, tho' less exalted, Subject.

-offir A 2 I AM

I AM often wont to call to mind the Battle of DET-TINGEN; and the unwearied Care taken by Your MA-JESTY of the gallant Sufferers in that fignal Engagement: with whom You were pleased to share the Toil and Dangers of That important Day. The paternal Tenderness, which flow'd from Your generous Breast on that Occasion, makes me flatter myfelf, that a plain and eafy Method of relieving Incidents, which unavoidably attend even victo-

victorious Arms, will prove no unacceptable Offering to Your Majesty. To me it was frequent Matter of fingular Admiration to behold a Great Prince descend so far from his elevated Station, as minutely and circumstantially to inquire into the particular State and Condition of every Individual, afflicted either with Sickness, or Wounds, incurr'd in his Service.

PARDON me, SIR, if I fay, the Business of the Hospital became now so considerable

rable an Object of Your Thoughts, that each succeffive Morning brought a Renewal of Your Majesty's Orders concerning it: which had so happy an Effect, that all possible Ease and Conveniency were thereby procured to the Distressed.

SUCH was YOUR MAJESTY'S Concern for Your
Troops, at a time when the
World might naturally have
expected to fee Your whole
Solicitude confined to the Perfon of your own Illustrious
Off-

Offspring: who was actually labouring under the painful Fruits of a Courage, inseparable from the high Blood, from which He descends. I beg leave, SIR, on this Occasion to declare, that the Trust, placed in me by Your Majesty, fill'd my Mind with a Pleasure, which was never exceeded by any Thing, but the Joy I afterwards felt on his Royal Highness's Recovery.

SHOULD my Design of publishing the following Treatise,

tife, and the Duty herein express'd, be agreeable to Your Majesty, I shall obtain the full Accomplishment of my Wishes: it being the greatest Ambition, that can enter my Heart, to be allowed the Honour to subscribe myself,

May it please Your Majesty,

Your Majesty's most Dutiful and

Most Faithful Subject and Servant,

JOHN RANBY.

PREFACE.

T may not be amiss to acquaint the Reader, that the Substance of the following little Piece was penn'd in a Camp; and communicated, in an Epistolary Correspondence, to some particular Friends, before my Return to England. I had then no Thoughts of ever making it publick: but as some very worthy Gentlemen, both in Physick and Surgery, (One in particular, who lately retired from a long Course of Business) have frequently a infinu-

infinuated the Use it might be of to the young Practitioner, I could not help being influenced by their Suggestions; which must always command from me the greatest Deference. Accordingly I collected my fcatter'd Papers; fell to modelling the refpective Materials; and foon brought them into the Form, in which they now appear. I have declined drawing Quotations from the feveral Authors, who have wrote on this Subject: not thro' an arrogant Self-Sufficiency, and a Prefumption, that there is Nothing in them worthy of being cited; but purely, as a Method of that nature would carry me beyond the Bounds -113

Bounds I had fix'd to myfelf; and at the same time be of no great Moment, in regard to my present Design: which is, to recommend plentiful Bleeding very early in these Gunshot Wounds; light, easy, Dressings; and, above all, to introduce the signal Use of the Bark.

THESE are the Motives that induce me to appear thus in Print, to which may be added one not less material: That, I mean, of inciting Others, of more considerable Abilities, to give a Detail of their correct Sentiments, and successful Practice, in this Point. As there are Some amongst us, who have

made several Campaigns, and kept, no doubt, exact Journals of their Chirurgical Proceedings in that Situation; 'tis a Justice, in my Opinion, which they owe to the World, to exercise their superior Talents, and leave recorded to Posterity What will convey eminent Benefit to Mankind,

As I have, in several Places of this Essay, taken particular Notice of certain Chirurgical Instruments; I here lay before the Publick an exact List of Those assign'd to every Surgeon, serving in their respective Capacities in the Army.

A Screw-Saw with two Blades.

A Knife and Catlin.

An Artery Forceps.

Two Cauteries.

Four Chissels, large, and of different Figures.

A Trephine, with two Heads and a Key.

A Perforatory.

A Lenticular and Raspatory.

A Case of crooked Needles.

A large, and fmall, Catheter.

Crooked Sciffors.

Two Whalebone Probes, Thirteen or four-A Steel Probe, Steen Inches long.

A Speculum Oris.

A Plaister Knife.

A Trocar.

Paces.

A Brush for the Trephine.

A Bar Instrument with two Claws.

Bullet Forceps, twelve Inches long, with four sharp Teeth.

Ditto, Strait, without Teeth.

A Levatory.

A Screw Tournequet.

A Case of Pocket Instruments.

A Case of Lancets.

THE Hospitals are not only furnish'd with these; but, thro' an abundance of Care and Tenderness for the Patients, supplied likewise with several very curious additional

ones;

ones; viz. Three Pair of strong cutting Pincers, &c.

Now tho' I am naturally averse to censuring any particular Person's Manner of treating Cases in Surgery; I can't avoid remarking this one Thing in respect of the extraordinary Implements, which make a Part of the above List: namely, I cannot conceive the Necessity of arming young Men with such a Number of Instruments; and particularly with such an unconscionable, unmerciful, Length of Probe and Forceps. However, I am the easier on this head, as I slatter my-

felf they will feldom or never be made Use of.

I CANNOT put an End to this Preface, without making my due Acknowledgments to some few of my most intimate Acquaintance, endued no less with the Social Virtues, than distinguish'd in their Medical Capacity; to whose Care and Superintendency in revising these Sheets, as they came from the Press, I am greatly indebted.

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HT This head, as I flatter toy-

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GUNSHOT WOUNDS.

tion I was under to attend the King last Year to Germany, naturally led me to revolve in my Mind whatever Practice I had been conversant with in regard to Gunshot Wounds: and put me on turning over the several Authors, who had wrote on that Subject. From the Perusal of These, and the Recol-

THE following Pages make not their Appearance in the World, thro' any little Incentive to Vain-glory, or impotent Defire of erecting a Monu-

Monument of Fame on fo minute and disproportion'd a Basis: The Aim and Scope I propose to myfelf in it being only to do That, which every Man of Probity, or Humanity, would look upon as infeparable from his Duty: namely, to contribute all that lies in my Power to the Ease, Relief, and Safety of my Fellow-Creatures; especially of those brave Men, who, prompted by a native Virtue and Valour, are at this Time gloriously embark'd in vindicating the Honour of their Country, and the Liberties of Europe: and who, in that arduous Struggle, must, in the natural Course of Things, fooner or later, be exposed to those Casualties, which 'tis the Defign of this little Essay to remedy. B 2

I SHALL purposely avoid entering into any Hypotheses; nor shall I concern myfelf in canvaffing the Opinions, either of my Predeceffors, or Contemporaries, in Surgery: contenting myself with the bare Recital of my own Practice. Which Task I shall take upon me to perform with all imaginable Candour, Veracity, and Integrity. So that the young Practitioner (and I put not Pen to Paper for the more advanced in the Profession) will find, in treating Gunshot Wounds, a plain and fuccinct Method sketch'd out to him, that feems not only entirely agreeable to Reason, but is confirm'd over and above by incontestable Experience, and evinced by a cona constant, uninterrupted, Series of Success, where there was the least Room to hope for it.

No Surgeon, who is tolerably versed in the Business of his Calling, can fail of entertaining a just and adequate Idea of the Nature of Gunshot Wounds; and consequently can never be any ways at a Loss in regard of the Management of them. And yet, either for want of a due Attention to the Matter in hand, or thro' a great Unwillingness to depart from a Path, which their Chirurgical Forefathers generally trod in, they too frequently decline exerting their own respective Faculties; and acquiesce in a Method, which, thro' a Sanction acquired

quired by Antiquity, stands as sacred and inviolable: how little soever there may be of Reason and Experience to ratify and support it.

THE first Intention, in regard of Accidents, caused by a Musket or Pistol Ball, is, if possible, to extract the Ball, or any other extraneous Body, that may be lodged in the wounded Part. And whenever these Casualties are attended with a great Effusion of Blood, from the Rupture of some confiderable Arterial Veffel, it will be absolutely necessary, with all imaginable Difpatch, to restrain the Bleeding, by taking up the Artery with the Needle: and, at the same time, to be particularly careful, that your Hold

Hold prove no ways elufive. There is no depending on any Applications, however styptic, on these Occasions.

In order to get at the Ball, or any other foreign Matter, that infefts the Wound, I would advise Probing, or Poking, to be used as sparingly as possible: having constantly experienced, thro' the whole Course of my Attendance in these Cases, that such a Conduct is highly detrimental to the Patient. And, indeed, where Probing is necessary, I would always prefer the Finger, as the best and truest Probe.

IF a Ball, or any other foreign Body, happens to be lodged near the the Orifice, or is perceptible by the Finger to lie under the Skin, tho' at fome Distance from the Mouth of the Wound; in the first Case 'tis requisite immediately to remove fuch extraneous Matter: and, on the other Occasion, to cut upon it, and take it out. But, when it is funk deep, and lies absolutely beyond the Reach of the Finger, I could never bring myfelf to thrust those long Forceps the Lord knows where, with scarce any Probability of Success.

A GREAT Number of Instances have occurr'd to me, where Balls have been quietly lodged in the Body; till, after many Years, they have work'd themselves a Passage towards

towards the Surface, and were confequently very eafily extracted; and feveral very lately, where Balls have been left behind: three particularly, wherein the ordinary Surgeons were concern'd. One of the Wounded was a Foreigner of very great Distinction; another a Commanding Officer, of fingular Honour and Humanity, in our own Army. The first received a Shot in the Breast from a Musket; the other was wounded in the upper Part of the Thigh with a Pistol Ball. The repeated Attempts made in fearching for the Bullets gave to Both great Pain; and brought on, in the Former, a Series of very untoward Symptoms. But that Sort of Treatment being

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at length defisted from, and the Track of the Ball, which went under the Pectoral Muscle, laid open about three Inches, a Foundation was begun for a Cure, which was foon after effectually completed. Various were the Opinions of the foreign Surgeons concerning this Matter, Some pretended to an infallible Cure by Injections: Others, by applying a certain Machine, and thereby pressing the Part. But the last Determination prefer'd the Knife to all other Expedients whatever. After Bleeding twice in the Arm, the Wound heal'd: and the Ball remains behind, without the least difagreeable Sensation, or any Inconvenience in Nature: as the Bullet did likewise in regard of the other

Captain of Dragoons, a Person of great Worth, who was shot in the upper Part of the Breast with a Musket Bullet, which lodged itself under the Scapula. The unsuccessful Essay, in poking for the Ball, produced a Fever. But, by giving over Probing, and by restraining the severish Symptoms, the Wound of course heal'd, and no more is to be heard of the Ball.

In case the Wound be occasion'd by a Musket or Pistol Shot, and consequently but small, it will be altogether

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gether necessary to dilate it without Delay. Yet, I think, in Wounds near a Joint, or in very Membranous or Tendinous Parts, the Knife, as well as Forceps, should be put under some Restraint; nor any more Opening made, than what is abfolutely requifite for the free Difcharge of the Matter lodged within. Wounds in the Joints are always dangerous, let them proceed from whatever Cause, whether from a Bullet, or any cutting Instrument: and Membranous or Tendinous Parts must, past Dispute, suffer from their being thus exposed to the very sensible Impressions of the Air.

I could produce many Instances of Balls going thro' Muscular Textures,

with very little Trouble. And I have known Wounds of the Scull, from a broad Sword, (where both Tables have been cut through, and a confiderable Piece loofen'd) having been fuffer'd to bleed for feveral Hours, to do well; nor to be attended, or at least very feldom, with any feverish Complaint. Which I am apt to attribute to the great Quantity of Blood lost immediately after the Parts had been injured.

A COLONEL of Dragoons received a Cut, from a broad Sword, on the fore Part of the Head, upon the Edge of the Hairy Scalp, about four Inches in Length. This Wound divided both Tables of the Scull, a

Piece

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Piece of which, of about an Inch broad, and very near two Inches long, was quite loosen'd from the main Bone. He had two or three more Cuts on the Head, a Wound on one Side of the Belly, made by a Musket Ball, that went aslant the lower Part of the Belly thro' the Abdominal Muscles, and carried in a Piece of his Sash along with it; and some more Cuts and Stabs in other Places of the Body.

This young Gentleman, early thus displaying undoubted Proofs of great Intrepidity, lay, under these Wounds, without any Chirurgical Help, till the next Day. He must, considering the Nature of his Wounds, and that he received the greatest Share

Share of them in the Heat of Action, indifputably have loft a confiderable Quantity of Blood. Neither the least Attack of a Fever, nor the Appearance of any bad Symptom, was, from first to last, any Interruption to the Cure: in the Course of which several Shivers of Bones were, from time to time, discharged from the Wound in the Head.

A LIEUTENANT of Horse, possess'd of many engaging Qualities, received a Cut in the Head, just as his Horse, which was shot, was falling. It had taken the Skin, Part of the Temporal Muscle, and a Portion of the outer Table of the Scull, as big as a Crown-piece, quite off. He had besides two very large Wounds on

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the back Part of the Head, which laid the Bone bare. These he received, as he lay upon the Ground: and was lest on the Field of Battle for many Hours. Yet he recover'd, without any supervening Accident, in as short a Time, as the Nature of the Case could possibly admit of. The immediate Loss of a great Quantity of Blood, when the Hurt is first received, prevents, no doubt, the Symptoms, that would otherwise accrue, and paves the Way for these favourable Issues on such Occasions.*

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^{*} The two preceding Cases do not, strictly speaking, belong to this Subject; yet I have inserted them, out of a good Number: in order to point out the great Use of immediate Bleeding on such like Accidents.

I r the Ball has gone quite thro', both Orifices are to be widen'd, (if in a Part, where it can be done with Safety) and particular Care is to be taken to preferve both Openings; That especially, which is the most depending. No Tents are to be made Use of, where there is any Possibility of avoiding them: and I would in general recommend light, easy, Dressings, with a slight, moderate, Bandage, just sufficient to keep them on the Part. Thin Flannel is what I would prefer, in case it can be got.

WHERE the wounded Person has not suffer'd any great Loss of Blood, it will be adviseable to open a Vein imme-

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immediately, and take from the Arm a good large Quantity: and to repeat Bleeding, as Circumstances may require, the fecond, and even the third, Day. This timely Precaution will prevent a good deal of Pain and Inflammation, forward the Digestion, and contribute towards obviating a long Train of complicated Symptoms, that are wont otherwise to interrupt the Cure, miferably harrafs the poor Patient, and too often endanger his Life. The following Instance, I think, in some measure demonstrates the Necessity of Bleeding freely as foon as possible.

of Dragoons, was wounded by a

Musket

Musket Bullet just below the Knee, on the infide. The Ball had made a great Laceration in the Skin, and laid the Membranes bare about four Inches in Length. I did not fee him, till two Days after the Injury. He was then very feverish, quite parch'd up with Thirst, and had a full Pulse, with a great Pain, Swelling, and Inflammation all round the Joint. I order'd immediate Bleeding, a cooling Regimen, made Use of a Fomentation, dress'd the Wound with Digestive warm'd, and laid the Bread and Milk Pultice over the Whole; not omitting an emollient Clyster, and an Opiate. The next Day his Pain rather increafed: wherefore he was let Blood a fecond, and after that, a third, Time. D 2

Time. Six Days were now elapfed, when a Miliary Eruption feized him, with frequent Bleedings at the Nose, and a Diarrhæa, which lasted about ten Days. Mean while, Matter was form'd in feveral Places about the Knee; which, on being let out, flow'd in prodigious Quantities. The Fever declining, the Bark was given him: but, as That, tho' join'd with an Opiate, ran thro' him, it was judged necessary to lay it aside. Notwithstanding he was now very weak and low, it was thought, in a Confultation, that the only Chance, which remain'd of his furviving, was the Cutting off his Leg. The Operation was accordingly perform'd, but without Succefs. Upon examining the Knee. there

there appear'd several Cells, full of Matter communicating with the Joint; which had in many Places eroded the Cartilages of both the great Bones.

For the first twelve Days it will be proper to observe a cooling Regimen, both in respect of the Medicines, that may be prescribed, and the Diet requisite for the Support of Nature. And as, in Circumstances of this Kind, 'tis necessary the Body should by all means be open; a Stool should be every Day procured either by Emollient Clysters, or some gentle Laxative taken in at the Mouth.

WHATEVER Application is of a hot, spirituous, Nature, I find remarkably

markably injurious on these Occafions; and what no wounded Part can in any Degree bear. Let the first Dressing be with Lint, dry, or moisten'd with a little Oil, and a very light Bandage; the next with a Digestive warm'd, and over it the Bread and Milk Pultice, mix'd with a fufficient Quantity of Oil to keep it moist: and, where there is great Tenfion, and the Wound large, a And this Course is Fomentation. to be continued, till the Sore is clean: and then it is to be heal'd according to Art. This Method will commonly promote a constant, easy, Perspiration, abate the Pain, very much facilitate the Digestion, and remove all Apprehenfions of any approaching Inflammation.

What induces me to mation. moisten the Lint with Oil, is the Ease, that is procured to a contused Wound from fuch an Application, in comparison of one of an absorbent, drying, Disposition: which, instead of giving free Liberty to the fanious Blood to discharge itfelf, and confequently preventing an Inflammation by unloading the Part, would possibly obstruct the Mouths of the Capillary Vessels, and hinder Nature from getting rid of that Incumbrance, which 'tis obfervable she very much affects to throw off.

Should an Inflammation seize any Part, thro' the Lodgment of a Bullet, or any other foreign Body, that

that could with Safety have been more immediately extracted; all Attempts of diflodging fuch extraneous Matter should be postponed, till the Swelling has in fome meafure fubfided, and the inflammatory Disposition of the Fibres is nearly vanish'd: unless the Ball, or other extraneous Body, lies at no great Distance from the Orifice; and there is, on that Account, a Certainty of removing this Incumbrance without any material Trouble to the Patient.

IF a Wound be of fuch a defperate Nature, as to require Amputation, (which is often the Cafe, when it happens in any principal Joint) it would certainly be of Consequence, could the Operation

tion be perform'd on the Spot, even in the Field of Battle: left by adjourning it an Inflammation, which one may very reasonably expect, should obstruct a Work, that ought rarely to be enter'd upon during the Continuance of fo calamitous a Circumstance. The Neglecting this critical Juncture of taking off a Limb frequently reduces the Patient to fo low a State, and fubjects the Blood and Juices to fuch an Alteration, as must unavoidably render the subsequent Operation, if not entirely unfuccessful, at least exceedingly dubious. And in Wounds, even where no Amputation is required, 'tis equally adviseable not to defer the Care necessary to be taken of them: left, by the Parts being exposed

posed to the Air, there might arise a Series of very dangerous Symptoms.

In order to make That practicable, which I here fo strenuously advise, I could wish to be indulged in offering a Scheme, which might, perhaps, be put in Execution with all the Facility imaginable. When the Army is forming This. for an Engagement, let the Surgeons, with their respective Mates, of the three or four Regiments, that are posted next each other, collect themselves into a Body, (the same Method being observed throughout the whole Line) and take their Station in the Rear, according to the Command of the General. Here let the Now let any Person of common Humanity reflect on the Consequences naturally flowing from this Manner of treating the Wounded on the Spot; and form a just Idea of poor Creatures being actually conveying, tho' with all conceivable Tenderness, from Place to Place, under the extreme Misery of large, lacerated, Wounds, bleeding Arteries, or fractured Limbs; and this abrupt, preposterous, Removal attended with the most fatal Symp-

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toms,

toms, of which there was not, perhaps, at first, the least Appearance, or Apprehension: and I am apt to think he will not hesitate one Moment in preferring this my Scheme to that Scene of terrible Distress, which I look upon as one of the most moving, that can be presented to the human Eye.

Wounds, that border on any confiderable Artery, are very apt to bleed afresh upon Motion, or the Return of a free Circulation of the Blood into the Part, which was interrupted at first by the Violence of the Injury offer'd it: and this is almost always the Case, when the Slough begins to separate. For which Reason, one should never attempt

attempt to remove it by Force; but wait with Patience, till there be a perfect Separation of this Slough: nor be in the least wife shock'd at the Accident of Arteries thus opening themselves, which a very moderate Experience will convince one to be almost inevitable. The Patient frequently gives Warning of what is coming upon him, by complaining of great Weight and Fulness in the Limb, which are ever accompanied with more or less Pulfation in it: an infallible Prognoftic of the Consequences. Let the Wound afflict whatfoever Part, if these Complaints attend it, I instantly injoin Bleeding, and the Bark.

I HAVE known feveral Instances of Persons losing their Lives from the starting of an Artery, before the Surgeon could reach them; particularly, where there has preceded an Amputation. And I dare affirm, the Quantity of Blood loft, especially in the Case last mention'd, has not amounted to twelve Ounces: which I don't know how to account for otherwife, than by the Drain which had been made from the Mass of Blood both before, and during the Operation. Whence a fudden Gush, tho' of so moderate a Portion of Blood, after the great Quantity already loft, gives a Check to the Circulation, and causes immediate Death. This Reflection, I think, ought to be a Leffon Lesson of Instruction to every Practitioner to be particularly intent on the faithful Discharge of his Duty in regard of tying the Vessels.

REPEATED Bleedings in the Beginning draw after them many Advantages. They generally prevent, and always lessen, any feverish Assaults, and seldom fail to obviate Impostumations. The Body must ever be kept in a laxative State: and, when Pain puts it on the Rack, immediate Recourse must be had to the sovereign, and almost divine, Powers of Opium.

THE Method, I have prescribed to myself in penning this small Treatise, leads me in this Place to speak

of the Bark: a Medicine, which no Human Eloquence can deck with Panegyric, proportionable to its Virtues. Of fuch incomparable Benefit it is to Mankind!

I HAVE for a long time indulged myself in the frequent Use of this noble Drug, in respect of large Sores of every Kind: and have often experienced, that, in those painful Circumstances, it would procure Rest, if given in large Doses, when even *Opium* had been taken without any manner of Effect.

Tно' I am aware, that a very ingenious Surgeon recommends the Bark * against Hæmorrhages in external

^{*} See Phil. Transact. No. 426.

ternal Wounds in general; yet the prescribing it in Gunshot Wounds in the Manner I introduced it last Campaign, is a Practice, as I conceive, no where left us on Record. And This I did with extraordinary Success: of which I shall give some few of the many Examples, that have occurr'd to me in Practice.

In all large Wounds, especially those made by a Cannon Ball, there is constantly a great Laceration of the Membranes, and Parts endued with an exquisite Sensation. And These are ever attended with an excruciating Pain, and a Discharge of a gleety Matter; which, if not restrain'd, proves often of the last Consequence. In this unhappy State,

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the Bark (given in Doses of a Drachm each, and repeated every three Hours; or oftener, if the Stomach will bear it) with furprizing Efficacy repairs the Breach made in the Constitution by this terrible Ha-Elixir of Vitriol, taken vock. three times a Day, in a Glass of Water, I find to be of fingular Benefit; and to prove a very good Affistant to the Virtues of the Bark. And, if the Body be costive, to each Dose of the Bark I add four or five Grains of Rhubarb, till that Inconveniency is remedied. Should the Bark run off by more than four or five successive Stools, I take care to check this Effect of it by ordering two or three Drops of Laudanum, or two Spoonfuls of the Diascordium

WHERE the Sore discharges a confiderable Quantity of gleety Matter, is flabby, looks pale and gloffy, (which Appearances are ever confequent to a Loss of Substance) the Bark continually relieves the Pain, that is predominant in this Cafe, thickens the Matter, leffens its Quantity, and quite changes the Complexion of the Wound. And, tho' the Patient has a dry Tongue, great Heat, a quick, low, Pulfe, and a Head hardly clear; yet, even in this Situation, I have known it to do Miracles. Nor (I freely own, when the Necessity for it is evident from Symptoms) have I, in ad-

administring it, the least Attention to the Quickness of the Pulse. And in Wounds, where, upon every Dreffing, the Arteries have started, and, of course, subjected the Patient to no little Hazard, I have frequently remark'd the Bark to procure the most unaccountably good Effects.

However, I would not be understood to infinuate, that the Bark will stop the Bleeding of any confiderable Artery. Nevertheless, tho' this efficacious Property is not to be expected from it, the vitiated Texture and State of the Blood (which, from too great a Degree of Fluidity, forces thus its Way thro' the Arterial Passages) will be alter'd more effectually from the Exhibition of it,

than from any Thing I know in the whole Materia Medica. From whence, I think, is plainly pointed out to us the Basis, we are to erect our future Superstructure upon. The Bark, on these Occasions, I constantly advise, together with Opiates, more or less, in Proportion to the Urgency of the supervening Symptoms.

In order to exemplify the Method laid down in the preceding Pages, I shall begin by giving a Detail of a very extraordinary Case, that center'd in the Person of a young Prince, no less distinguish'd for his Martial Prowess, than high Birth. This illustrious Personage received a Wound from a Grape-shot

shot discharged from a Cannon, which went quite thro' the Caif of his Leg. It enter'd on the Outfide, close to the Fibula; a little above where the Gastrocnemius Muscle begins to grow Tendinous. Part of which, together with the common Membrane, that invests all the Muscles of the Leg, appear'd jagged at the Mouth of the Wound: which was fo exceedingly wide, that I believe its Orifice might have very well admitted a large Hen-Egg. The Shot made its Exit close by the Tibia: nor were the Dimensions of this Orifice a jot less considerable, than what I have been reciting of the other. It had drove the Extremities of some of the Muscles, which it had tore afunder

in

in its Passage, quite out of the Wound: which, as no effential Artery was burst, bled rather more, than what is usual for this Sort of Wounds to do at first; especially, as I had not omitted the necessary Precaution of taking away from the Arm, in the Field of Action, very little less than twenty Ounces of Blood. I applied a very eafy, light, Dreffing; and just supplied Bandage enough to keep it on the Part. That Night was not pass'd without much Inquietude. Next Morning Things were fo circumstanced, that there was an unavoidable Necessity for removing him a confiderable Distance from that Situation. Accordingly, he was convey'd in a Coach, under great Uneafiness (tho' through

through no Fault of the Vehicle) about fifteen English Miles to Quarters: which, tho' fufficiently remote from any hostile Alarms, were, nevertheless, but very indifferently accommodated; and, confequently, in no Degree fuitable either to his high Quality, or the Circumstances his early Valour had laid him under. Some few Hours after the Fatigue of the Journey, I repeated the Bleeding, and gave Directions for an emollient Clyster: ordering at the same time some Gascoign's Powder to be taken every four Hours, with a proportionable Addition of Nitre. The Nature of the Wound confider'd, the Quiet he enjoy'd that Night far exceeded my Expectations. The next Evening Evening, notwithstanding, I bled him for the third Time, and repeated the Clyster. To the Sores I applied warm Digestive, and wrapp'd the whole Limb in a Bread and Milk Pultice, in which was just Oil enough to prevent its growing dry. A bloody Ichor, which is a constant Forerunner of Matter, and ever, in the Beginning, carries with it a good Prognostic, made now a plentiful Discharge. The Swelling was not very great, and the Inflammation but little. Care was taken to keep the Body open, and the Course of the cooling Powders continued to the fifth Day. He had now some Complaints of a little Heat: but, as those were very transient, and he afterwards tolerably

bly eafy, they were not much attended to. I think this Day, the King's Physician, Dr. Werlhoff, made him the first Visit. It was judged proper to keep in the Road of the cooling Regimen prescribed, both as to his Medicines, and Diet. The Wound now began to make a good, and regular, Discharge of Matter: no ways exceeding in Quantity what is expected from Sores of that Nature. There was no Abscess, no Lodgment of Matter, nor any extraneous Body, from the Beginning to the End, to obstruct our Endeavours; tho' the Swelling was rather fomewhat increafed, as was likewife the Difcharge, on the eighth Day. Towards Noon he complain'd of be-

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ing chilly; and was foon after attack'd with a fevere Shivering: which continued haraffing him for the Space of four or five Hours. Then succeeded a Heat, which did not in the least abate the greatest Part of the Night. Towards the Return of Morning he began to fall into a Sweat, that foon became profuse. We attended very early, and agreed to give him better than a Drachm of the Bark in a Dofe every two Hours. But, as This gave him feveral Stools in a short Time, we added to every Dose three Drops of Laudanum, till that Effect of it was prevented. I must remark, that the Sweat had been on him, when the Bark was first prescribed, about three Hours. G 2 When

When the Sweat, which continued about twelve Hours, was entirely off, he took Elixir of Vitriol twice or thrice a Day. From this Period, there was an Abatement both of the Swelling, and of the Discharge: nor had we the least Return of any feverish Appearances. On the twelfth Day a Slough came away in one intire Piece, without either Force or Pain, near the whole Length of the Tendo Achillis. The Bark we thought proper to continue for fome Time. The Wound, indeed, heal'd but flowly: which I conceive to be altogether owing to his being constantly on his Legs, and scarce ever without his Boots on. There is no great matter of Stiffness now remaining in the Limb:

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even not so much as one would naturally suppose must be necessarily consequent to a Wound among a Cluster of Muscles; where the Fibres, that ought to be loose and free, are too much confined and restrain'd by the Means unavoidably made Use of to effect the Cure.

I HAVE been a little more circumstantial in my Relation of this Case, than, perhaps, was absolutely requisite. But, as the Behaviour of my Princely Patient on that Day was carried to the highest Pitch of Heroism; all the World, animated with any Degree of Virtue, or Honour, were attentive to the Event, and became deeply interested in his Recovery: an Event, which I esteem

A GENERAL Officer in our own Army (whose fingular good Properties in domestic Life are not less con-

conspicuous, than his great Talents in Military Affairs) received a Shot from a Musket, that went obliquely quite thro' the Os Calcis. Orifice, where the Ball enter'd, had been dilated before I saw him, which was not till the third Day from the Accident. I observed the Part, which is very Membranous, to be terribly lacerated, the lacerated Membranes to hang out at both Orifices, and the Bone itself shiver'd. The whole Foot, on which he stood for two entire Hours after the Shot had pierced it, was much fwollen, tho' without any great Degree of Inflammation, or Pain. I took from the Wound feveral fmall Pieces of Bone, applied warm Digestive, and laid the Bread and Milk

Milk Pultice over the Whole; did not omit Bleeding, and injoin'd the cooling Regimen: which Method was purfued for two or three Days; when the Discharge, Inflammation, and Pain increased, with a quick Pulse, and a general Uneafiness. These Appearances determined me to repeat the Bleeding, and to administer the Bark: the Benefits from which were foon very evident, by an Abatement of the Heat, and a Lessening of the Discharge. A very inconsiderable Portion of Matter now ouzed from the more depending Orifice. It almost all came out of the upper Mouth of the Wound. There was Nothing I fo much wish'd the Accomplishment of, as to have these two Orifices laid

laid into one. But as the Ball, the whole Length of its Passage, had form'd a Bony Arch, of no small Thickness, and the Texture of the Part besides was very Membranous; I defisted from the Attempt for the present: contenting myself with the Hopes, that the Matter would very foon find its Way to the lower Orifice. Things thus circumstanced, I put a Sindon thro' the Wound, of a very fine Piece of Holland Cloth, moisten'd in Digestive, which with great Ease I changed every Dreffing: and perfifted in this Method for feven or eight Days, till the Matter, not much in Quantity, was determined to the Opening below. When This was effected, I laid the Sindon afide. The Cure henceforward H

ward was no ways retarded by any Manner of Lodgment; which, indeed, before was very inconfiderable. Numberless small Shivers of Bone were constantly brought out with the Sindon; which, at the same Time, put the Matter on making its Exit along with it at the inferior Orifice. Not long after, I discontinued the Application of the Pultice, and defifted from the Use of the Bark: but, Pain increasing, I found myfelf under a Necessity of recurring to Both again; which I did on the next Dreffing, and confequently that Evening. For I never fail'd, particularly as it was very hot and fultry, to drefs Wounds of this Sort twice a Day. Upon our Decampment from this Place,

my Attendance on this Gentleman was of course interrupted for four or five Days: after which Time he follow'd the Army by Water. The Fatigue, he underwent by this Removal, brought on a flight Inflammation, augmented the Pain, and increased the Discharge of Matter. I then determined with my felf, as foon as these Symptoms should cease, and the present Russle be a little over, to lay both Orifices into one. This accordingly I did, still continuing the Use both of the Bark, and Pultice. Every Thing appear'd now with a good Afpect. But, as the Season of the Year began to advance, and there was no Possibility of his accompanying the Army with any tolerable Conveni-H 2 ency, ency, or without prejudicing his Health, I advised him to repair to England: which Counsel, tho' not without some Reluctance, he shortly after put in Execution. I had, indeed, before that, exhorted him to the same Purpose, being convinced this Misfortune would infallibly prove a Case of a tedious Nature. He has been in England now feveral Months; and, tho' the Wound is not, as yet, entirely heal'd, there is nevertheless all the Appearance in the World, that it will be fo. He went on in the Course of the Bark till his Arrival in London, and for some Months after: nor did he ever return to the Use of it, when it had been at any time intermitted, without

without finding himfelf relieved by its fingular Virtues.

THE next Instance I shall bring, of the great Efficacy of the Bark, will be That of a Major of Horse, whose Foot was shot off by a Cannon Ball, except just where it hung, fuspended only by a Piece of Skin. The first Surgeon he met with cut that Skin afunder, and applied his Dreffings: but, upon Motion, and the Return of a free Circulation, the Limb bled a-fresh. The Surgeon of the Troop, in attending him, proposed taking off the remaining Part of the Leg; which Advice was immediately complied with. But, I don't know by what Means, a large

a large Portion of the Muscles, robb'd of the Skin, was left naked; which, on the least Motion imaginable, or accidental Touch, even of the foftest Substance, caufed a most exquisite Pain. And, if I remember right, the great Artery was the only Vessel, that was regularly tied. Round the raw Stump was roll'd a Fillet more than ordinarily tight. Such was the Method of Dreffing made Use of on that Occasion. This brave, tho' unfortunate, Officer, lay the rest of the Day, and all the subsequent Night, in a Waggon, which had fcarce any Covering, miferably exposed to the Inclemency of the Rain, that pour'd from the Heavens in continual Floods. The

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next Day, after Dinner, he applied for my Affistance. On my attending him, he complain'd of great Pain in the Stump, and a Pulfation in it, that was utterly intolerable. I immediately fet about Opening it, removed that circular Band, which, from its Tightness, had render'd those naked Muscles very full and turgid, and brought on a confiderable Swelling above the Knee. Upon removing this Band, the Blood rush'd out from several Arteries, and particularly from one that was very important. When, after a great deal of Anguish to the Patient, and no fmall Trouble and Perplexity to myself, I had fortunately tied the Vessels, I applied a very light and foft Dreffing; and

over all a Flannel Cap, (which I would ever recommend) with no more Rolling, than what just affisted in keeping on the Dreffing. I directed besides a Course of Testaceous Powders with some Nitre, and order'd some Drops of Laudanum to be taken occasionally, as the Necessity might offer itself of procuring Sleep. In spite of all my Circumspection and Management, no Rest that Night, nor the succeeding Day and Night, afforded him any Relief. His Pulse was very quick and low, his Tongue dry, and he was fomewhat inclined to a Delirium: the Stump discovering a great Tendency to bleed. This was his Situation, when I gave him the Bark: every Dose almost of which,

which, as his Body was apt to be costive, I accompanied with a few Grains of Rbubarb. He also took thrice a Day twenty Drops of Elixir of Vitriol in a Glass of Water. This Regulation he was under both before, and fome Months after, his Return to England. He is poffessed at present of a tolerably good Share of Health: but, thro' the Shortness and Tenderness of the Stump, and its being very much subjected to crack, he but seldom, as yet, can enjoy the Use of his Wooden Leg. I can venture to affirm, that he took at least five Pounds of the Bark. The little Omissions hinted at in the above Relation might probably be owing or order of the to

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58 The Method of Treating to the almost continual Alarms from Hussars, during the Operation.

THIS leads me to mention What I have often remark'd to be the Case in amputated Limbs, especially in the Leg and Thigh: where the Habit of Body has been previously bad, or else made so, by deferring the Operation. And it is very common, in Scorbutic Constitutions, for a Sore, the first eight or ten Days after taking off the Limb, to promise all imaginable Success: from which time it frequently begins to gleet prodigiously, looks pale, gloffy, and flabby; and, this Gleeting, if not check'd, in a little while runs the Patient out of the World. In Exigencies of this Kind the I

the Bark hardly ever fails to procure Relief; and works an apparent Change in a very short Space of Time: fometimes in twelve Hours. This I can attest for absolute Truth, in regard of a very worthy Gentleman about fifty Miles from London, who broke his Leg by a Fall from his Horse. I took it off the fecond Day from the Accident, and, after the first Dressing, resign'd him to the Care of his neighbouring Surgeons: not in the least afterwards fuspecting, but that every Thing was fucceeding agreeably to our Wishes. But the Scene was quite reversed. For, about fixteen Days after, I received a Letter from the Gentlemen, who had the Management of him, intimating, that I 2

that a finall Artery near the Skin bled very freely, on their removing the Dreffings. In Answer, I advised a Vein to be open'd in the Arm, and the Bark to be taken instantly. But, as the Symptom of the Arterial Opening ceased, and the Patient was without any Sign of a Fever, the Advice of feeking Resource, from the Bark was postponed. The feven and twentieth Day, another Surgeon, Eminent in the Profession, and myself were hurried out o' Town to his Affiftance. On our Arrival, we found him very much emaciated, a great Gleet incessantly ouzing from the Stump: which, on the Removal of the Dreslings, bled from every Pore, like Water press'd from a Spunge:

We immediately gave him the Bark, and repeated it every two Hours. The next Morning, the Discharge was confiderably lessen'd, nor did there appear the least Footsteps of Bleeding. If he accidentally at any Time neglected taking it, only for a Day, or even leffen'd the Dofes, the Wound inevitably pointed out the Omission by the Alteration of its Complexion. He perfifted in the Method of taking the Bark every two or three Hours, till he came to Town: when it was thought proper to give him a larger Respite. He now enjoys a perfect State of Health, and has done so, ever fince the Stump was heal'd. But, e'er This was accomplish'd, he took near nine Pounds of the Bark. IN

In the Case, I shall next recount, the Reader will very readily perceive the Inconveniencies and Obstructions of Cure, that succeeded a strong Antipathy to the Bark.

A Captain of a Troop of Horse, a Gentleman deservedly esteem'd, happening to be so far advanced, that all Possibility of avoiding to engage with the Enemy was entirely cut off, fought his Way singly thro' many Squadrons of French. In his Retreat from this desperate Conslict, a Pistol Ball took him in the Back, enter'd just by the lower Edge of the Scapula, (a small Portion of which it broke off) and made its Exit just below the short Ribs

Ribs on the opposite Side. I have often wonder'd, how the Bullet could pass over the Vertebræ of the Back without hurting them: which, in the Subject before us, it indifputably did. Bleeding and the cooling Regimen were prescribed him: nor was there wanting a proper Dilatation of the Wound. Every Thing was now in fo good a Posture, that he walk'd abroad feveral times: tho', I must confess, not altogether with my Consent. One of the Orifices heal'd in a short Space of Time: and fo, indeed, feem'd the other disposed to do, had the Clofing of it been judged confistent with the Patient's Safety. But, some very indifferent Symptoms arifing, it was advisable by all means 200

means to keep it open. For on the twelfth Day, he grew very feverish, and spit a little Blood: which determined me to bleed him freely, and to continue the cooling Course of Medicines; to which I would willingly have join'd the Bark: but he absolutely refused to listen to that Proposal. The next Day, I found him not at all better; fo repeated the Bleeding. That Evening, notwithstanding, he discharged a great Quantity of Blood, both from his Stomach, and Lungs: whereupon I open'd a Vein for the third time. He still continued to turn a deaf Ear to all I could fay in Recommendation of the Bark. However, at length, he was induced to take some Extract of

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it; which immediately wrought an apparent Amendment in him: But his Aversion to this Drug was of fuch an obstinate Nature, that he foon defifted from the Use of it; even in this Form. The Vessels perfifting to open themselves, and the Blood frequently to rush out, I was forced to recur fo often to the Expedient of the Lancet, that I really grew weary of keeping an Account of my Operations on those emergent Occasions. These Evacuations necessarily reduced him to a very low Ebb: and yet his Antipathy to the Bark remain'd in him as inveterate as ever. 'Twas from the Confideration of these Incidents, that I was resolved to keep the Wound open; which was not effected K

fected without some Difficulty. this uncertain State I was obliged to leave him: but, as the Bleeding often return'd, there was as often a Necessity of taking away Blood. About a Month after, he came to me at Mentz, in fuch a debilitated Condition, that I could scarce ever hope to fee him more. From thence he immediately fet forward for England; where, on his Arrival, he put himself under the Care of a Phyfician, and Surgeon, (Both eminently distinguish'd in their respective Professions) who were altogether at a Loss how to account for the extraordinary Circumstances of his Cafe. However, the Symptoms frequently returning, the Lancet

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was as often made Use of. At length he was prevail'd upon to take the Bark, with Opiates: which abated the Bleeding, tho' they did not entirely prevent it. As his Physician had observed, notwithstanding the Blood taken from the Arm, that the Vessels for the most part made a freer Discharge than before that Operation; and, confequently, that he was under a Necessity of making farther Evacuations by Bleeding, he was determined to open a Vein in the Foot: which, upon repeating, and accompanying the Bark with the Royal Styptic, those Symptoms in a moderate Space of Time entirely left him. It is very just I should, on this Occasion, communicate to the Ding; K 2

the Reader a Remark, which the fame Physician, in his extensive Practice, has frequently made in respect of Hæmorrhages iffuing either from the Nose or Lungs: viz. that Bleeding in the Foot has proved of great Efficacy towards stopping those Difcharges, when taking Blood from the Arm has not in the least afforded any manner of Check to them. But to return. From that time the Patient began to get the better of his Disorders: and at present, tho' far from being re-establish'd in his former Health and Strength, yet, he enjoys a greater Portion of Both, than I once could imagine would have ever come to his Share. Thefe Gentlemen attempted, as I had done, to keep the Wound runplish that Expedient, and left the Sore thenceforward at full Liberty

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to heal.

It has ever feem'd very mysterious to me, from what Cause this Series of surprizing Symptoms could spring. Had there been but one Orifice, 'twould then have been evident, that they would have been owing to the Ball's remaining in the Body. Indeed, as Pistols are generally charged with a Brace of Balls, 'tis possible, they might have both enter'd at the same Orifice; one sinding its Way out again,

again, the other lodging in the Cavity of the Breast: tho' This, I think, is highly improbable.

In the following Case, it will be submitted to the Reader to draw from it what Conclusions he pleases, in respect of the Use of the Bark. An Austrian Officer, who had his Hand miferably shatter'd by a Cannon-Ball, was, by some Accident, left in a Wood near the Field of Battle, destitute of any Manner of Help, from Thursday (the Day of Action) till the Sunday following; when he was brought to Hanau. The next Morning, I was carried to fee him, and to affift in taking off his Arm. On viewing it, I found it mortified almost

most to the Elbow, with a great Swelling and Inflammation quite up to the Shoulder. As it was by no means advisable to attempt an Amputation in fuch Circumstances, I proposed giving him the Bark: which, being no ways objected to, he enter'd upon immediately. The next Day, he was rather better: but, on the third, was evidently fo. The Inflammation was less, the Swelling began to fubfide, and the Edges of the Mortification were feparating. This Success, from the Bark, was Matter of great Surprize to the Surgeons, who attended him: the Practice of administring it on these Occasions being altogether new to them, and unprecedented. As to the Physician, Circums. he

he was not unapprized of its Use in Mortifications. The Arm was fomented and wrapp'd up in the Oatmeal and Stale Beer Pultice with Theriaca: and the dreadful Symptoms, that forbad the Operation, were now so much abated, that his Surgeons did not at all hesitate to take it off. But This was done to very little Purpose; for three or sour Days after the Amputation (his Jaw being fix'd by a Convulsive Attack, and his Countenance greatly distorted) he expired.

I HAVE seen two more Instances of Persons being seized with this Sort of Convulsion, who both died. And (What adds to the melancholy CircumCircumstances) tho' they labour'd under an Impotency of Speech, yet their Senses were no ways impair'd. I believe this Convulsive Incident to be no very uncommon Symptom in Gunshot Wounds; nor indeed in any other, where there is a considerable Laceration of Parts, thick interwoven with Membranes.

Now, tho' I have the highest Ideas imaginable of the Virtues of the Bark on Occasions, similar to those I have been delineating; yet, I conceive it but equitable to exhibit likewise an Instance or two in my Practice, where it was not attended with its accustomed Success. The preceding Case may, perhaps, be thought

thought to leave the Matter doubtful as to any Benefit conferr'd by it: and from What I shall next relate 'twill be very certain, that the Taking of it produced no Advantage whatever. A proper Judgment, in these Matters, is ever to be form'd by comparing Events; and weighing, with the greatest Exactness, the good Effects, against those, that have been of a contrary Nature. By this Means we shall be enabled, like judicious Pilots, to fhape our Course aright; nor touch upon a Sand a fecond time, that had once endanger'd the Vessel. Whatever favourable Conceptions the Reader may entertain of the Bark, from the foregoing Relations, they must result from the artless Recital cital of real Matter of Fact; not be fuggested to him thro' the insinuating Powers of storid Diction, or prevailing Elegance of Stile. I have no Pretensions to Purity of Language: nor, indeed, have I the Leisure to dress up my Pages in the shining Ornaments of studied Elocution. But to the Business in hand.

A GENERAL of the Hanoverian Forces, an Officer of establish'd Merit, of about seventy Years of Age, had his Ancle, with the neighbouring Parts, all terribly shatter'd by a Cannon-Bullet, and lay under the Management of his own Surgeon. My Assistance was applied for, the third Evening after L 2

the Accident. On taking a Survey of the Wound, I judged it a Case, that plainly indicated an immediate Amputation. Accordingly, at the Sollicitations of the Gentleman, who attended him, I instantly cut off the Leg. That Night he rested tolerably well: and, on the next Dreffing, every Thing feem'd to carry fo good a Face, that I began now, notwithstanding his advanced Age, and the Circumstances of the Operation's not being perform'd fooner, to indulge fome Hopes of a favourable Issue in the Affair. The King's Physician likewise paid him regular Vifits. My Rule was to fee him every third or fourth Dreffing. But, as he was, about the fixteenth Day, attack'd by a Diarrbæa,

rbæa, (which is no Obstruction to the Exhibition of the Bark, provided each Dose be accompanied with three or four Drops of Laudanum) I was requested to give my Attendance at that Morning's Dreffing. I must own, the unexpected Alteration, I found wrought in him, perfectly furprized me. The Stump look'd pale, and the Flesh was beginning to quit the Ends of the Bone: which Symptom, even in Youth, affords but a very indifferent Prognostic, and, in old Age, I believe, seldom fails to prove fatal. However, we dress'd the Sore with Pledgets of Digestive, being first dipp'd in Oil of Turpentine warm, and agreed to his taking the Bark. From this time he grew worfe and

and worse, till he breath'd his last. I shall not interrupt the Reader in making what Reslections he pleases on this exact Narrative. But I must not omit to do Justice to the Doctor, by declaring, that the Bark could not stand in any one's Opinion in higher Esteem, than in his.

As my Design in setting out was not to make any considerable Excursion, I now hasten to put a Period to this plain, practical, Discourse. What I have therein recounted, I am apt to think, will contribute, in some measure, towards lightening the Surgeon's Chest, and banishing from the Republick of Surgery the extravagant Use of Probes, Forceps, Mallets and Chissels,

Chiffels, with various other Instruments: which are not only extremely painful to the Patient, but likewise expose his Life to great Hazard; and are moreover, in my Opinion, far from doing any Honour to Those, who use them. Nature's being contented with a Little, is an Axiom, that not only respects the Retrenching of Superfluities in regard of the real Exigencies of Life; but may also be extended to the Management, which these Kinds of Wounds, generally speaking, only stand in Need of.

To put this Matter in as clear a Light as possible, we will suppose a Ball to be lodged in any Part, Part, beyond the Reach of the Finger; entirely out of the Way of being mark'd by the external Touch. Now it will appear evident, upon the least Reflection, that the Thrusting, first, that long Probe, in Quest of the Bullet, then, those longer Forceps, either with or without Teeth, into a Wound of that Kind, tho' with a Sort of Certainty to extract it, must either contuse, or irritate and inflame, the Parts to a great degree: and, confequently, do as much, and perchance more Mifchief, than the Ball did at first by forcing its Paffage fuch a Length of Way. And should they at the fame time lay hold of any Nerve, Artery, or even common Membrane of of a Muscle, together with the Ball, (which I think must scarce ever fail of being the Case) what shocking Consequences would attend such a Proceeding! Nor would Attempts of this Sort be less injurious, in case a Bullet should happen to be lodged in the Cavity of the Belly, or Breast: whereas Lead, 'tis well known, will lie a long time in several Parts of the Body, without any material Hurt, or even Inconveniency.

As to Chissels, I am quite of Opinion, they ought upon no Occasion to be made Use of; inasmuch as they too frequently split the Bone up to the next Joint, or shiver it in such sort, that, instead

of promoting a Cure, by removing the Part affected, they generally bring on Symptoms worse than the Disorders, they were intended to remedy. A good Knife, without dispute, is all that is necessary to the Taking off a Finger: or should one of the Bones of the Metacarpus require Amputation, a small Spring-Saw does the Work with great Ease and Safety.

THE Reader will easily recollect, that where-ever, in the foregoing Relations, I have made Mention of Dressings, they were from the first of a soft, easy, supple Nature, such as Lint moisten'd with Oil, or, I might have added, Pledgets of Digestive; and the Bandage light: hot, hot, dry, and spirituous Applications being what I never found to answer the expected Success, but, on the contrary, productive frequently of great Inconveniencies. And, I confess, the Hopes I had of familiarizing these to the young Practitioner, was one main Motive, for my thus launching at once into the Publick, intirely unconcern'd for the Plainness of the Dress, with which my Thoughts are cloath'd.

As to the Bark, the Instances, I have brought in Support of the Efficacy, I have ever and anon ascribed to that favourite Medicine, I think, evidently demonstrate its specific Properties, on the Invasion of those Symptoms, I have frequently

quently recapitulated in the Thread of my Discourse. And I flatter myself, that, for the Future, this powerful Production of Peru will in fuch Cases be held in proper Esteem by every Person, divested of Partiality and Prejudices, into whose Hands this well-intended Sketch of mine may happen to fall. In a Word, I solemnly protest (What I promised in my introductory Part of this small Essay) that I have given an Historical Account of no Chirurgical Process, but what is, in every respect, and Circumstance, according to the best of my Remembrance, exactly conformable to Truth.