How to Care

for

The Injured.

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HOW TO CARE

FOR THE

INJURED,

—BY—

Edmund C. Brush, A. M., M. D.

SURGEON TO

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PHYSICIAN TO

THE ZANESVILLE WORKHOUSE; ONE OF THE PHYSICIANS TO THE MUSKINGUM COUNTY INFIRMARY; MEMBER OF THE BOARD OF EXAMINING SURGEONS FOR U. S. PENSIONS; MEMBER OF THE NATIONAL ASSOCIATION OF RAILWAY SURGEONS; MEMBER OF THE ASSOCIATION OF SURGEONS TO THE PENNSYLVANIA COMPANY, ETC.

ZANESVILLE, OHIO.

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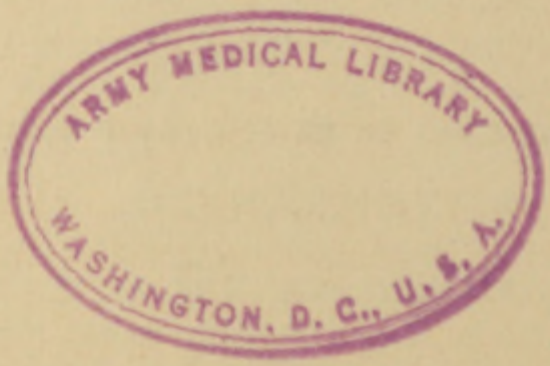

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Introduction.

The purpose of this book is to give instruction in regard to the temporary caring for and moving of injured persons, until the services of a surgeon can be secured.

As these suggestions are intended more especially for railroad injuries, the appliances recommended for use, are limited to such as are usually found on railway trains.

In railroad accidents it is often necessary to transport the injured some distance to obtain medical assistance, or wait some time until such help can be brought. To the injured, and their friends, minutes under such circumstances seem hours, and if the railroad man or traveler knows what to do and how to do it, he can often save much suffering and do a great deal in many cases towards saving life. E. C. B.

ZANESVILLE, O., June, 1888.

Introduction to the Second Edition.

The first edition of this little work, issued two years ago, having become exhausted, a second edition with some changes is issued.

Ten years service as a railroad surgeon, and the consequent association with railroad men, has fully convinced me of their willingness to learn all they can in regard to caring for the injured. As a class railroad men are apt and efficient in emergencies, and always ready to lend a helping hand.

E. C. B.

July, 1890.

[From the Columbus Medical Journal, July, 1888.]

HOW TO CARE FOR THE INJURED.

BY EDMUND C. BRUSH.

The purpose of this book is to give instruction in regard to the temporary caring for, and moving of injured persons, until the services of a surgeon can be secured. The suggestions are intended more especially for railroad injuries, and the appliances recommended are limited to such as are usually found on railway trains. A wide distribution of this little pamphlet among railroad men would result in much good to the injured.

BALTIMORE & OHIO RAILROAD CO.,
RELIEF DEPARTMENT,
BALTIMORE, April 26, 1890.

Dr. E. C. Brush, Zanesville, Ohio,

DEAR SIR:—Through your courtesy I am in receipt of a pamphlet, prepared by you entitled, "How to Care for the Injured," which I appreciate very much. We have had in contemplation for a long time the preparation of something similar for general use on this road. The difficulty we have experienced is, not to put in too much, which we are all apt to do. I think you have happily solved this problem, and if you have no objections, I would like either the privilege of reprinting your pamphlet, giving proper credit, or of making use of it in preparing one for this service. Again thanking you for your kindness, I am, very truly yours,

S. R. BARR,
Superintendent.

Chapter I.

How to Stop Bleeding.

Many cuts will stop bleeding, from natural causes; when, however, the bleeding is profuse and constant, some means must be adopted to arrest it.

If a finger is bleeding, take it by the sides with the thumb and finger and squeeze it, or tie something tightly around it, between the injured part and the hand.

If the hand or arm below the elbow is bleeding, grasp the arm firmly at the elbow with both hands, the thumbs being pressed deeply into the bend of the elbow joint. A pad made of a large handkerchief may be used under the thumbs. The better plan when the injury is extensive, is to grasp the arm by the "muscle" half way between the elbow and shoulder, having the fingers on the inner side of the arm and buried as deeply as possible in the flesh. A pad on the inner side of the arm, made of a folded handkerchief, and then a second handkerchief or a suspender tied lightly around the pad will be firmer and more efficient.

If the arm is injured so near the shoulder as not to admit of pressure by the hand or a band, take a handkerchief and fold it into a pad one inch or more square, place this pad in the arm pit; now take a second handkerchief or suspender and pass it over the pad, carrying the two ends over the top of the shoulder, and tie tightly.

If a toe is bleeding treat it the same as a finger. If the foot or leg below the knee is bleeding put a pad similar to the one for the arm pit, in the hollow under the knee, bring a band over the pad and around the leg just above the knee cap and tie it. The hands and fingers may be used temporarily here as in other places.

When, from the nature of the injury, the foregoing methods can not be adopted, it will be well to act as if the thigh was injured. If the bleeding is from the thigh, stand facing the injured person, take the thigh, as high up as can be done, between the hands, this will bring the thumbs in front—now press the thumbs, crossed, as deeply as possible into the middle of the thigh; if at first the flow of blood is not stopped, shift the thumbs a little towards the inner side of the thigh, and then, if that does not suffice, a little towards the outer side. That will do until a pad can be applied in the place of the thumbs and a band put around the leg. The thumbs will soon give out when so much force is used. In all cases where a band is

used, it may be tightened by slipping a stick, or poker under it, on the OUTER SIDE of the limb, and turning the stick, augur fashion.

Bleeding from cuts about the head, face and body, may be arrested by pressure with a cloth, wrung out in iced water if at hand. Care must be exercised in pressing about the head of an unconscious person, as the skull may be fractured and pressure would do damage.

To stop nose bleeding, snuff up cold water and hold the head erect; pressure on the sides of the nose will sometimes stop the bleeding. Ordinarily there is no immediate danger from this kind of hemorrhage.

Chapter II.

How to Dress Burns or Scalds.

Immersing the burnt portion in cold water if practicable, or applying a cloth wet with a solution of baking soda, (tablespoon full to half pint of water), will relieve the suffering. Another and convenient way is to cover the burn or scald with "waste" saturated with the oil used in the axle boxes and about the engine. The main thing to do in order to relieve the suffering, is to exclude the air from the burn. The free use of "waste"

and oil is the best plan and then cover with clothing or whatever is at hand.

Always remember, if going to the assistance of a person whose clothing is on fire, that the way to extinguish the fire is to *smother* it. Wrap the burning person in coat, blanket or whatever is available.

If the burnt person is exhausted from the shock, give stimulants cautiously and in small doses often repeated.

Chapter III.

How to Restore the Unconscious.

Place the person on the back, with the head on a level with, or a little lower than, the body. (Never put an unconscious person in a sitting position.) Loosen the clothing at the neck and waist. Bathe face and neck with cold water; rub the hands and feet. Engineers often have ammonia about the engines or some passenger may have it, or liquor—if so, pour a few drops on the hand or handkerchief and hold it to the nose, occasionally withdrawing it. Do not let any run into the nose. Do not give an unconscious person anything to drink; it is liable to get into the windpipe and do damage. As soon as there is some return of consciousness and something can be swallowed, raise

the head and give water or stimulants in SMALL quantities. The inclination to give whisky too freely should be guarded against. The writer has found wounded men in an intoxicated condition from the too free use of liquor, given by injudicious friends. Do what is done carefully, and judiciously, without being in too much of a hurry. Do not expect satisfactory results *at once*. If upon partial return of consciousness a person seems dazed quiet their fears and let well enough alone until a physician arrives.

Chapter 16.

How to Remove Foreign Bodies From the Eye or Ear.

If anything has blown in the eye and the consequent flow of tears does not wash it to the inner corner, take the upper eyelashes between the finger and thumb and pull the upper lid down over the lower. This makes the lower eyelashes sweep the inside of the upper lid. If this does not remove the mote and it can be seen on the ball, a silk handkerchief can be used to remove it. If however, the foreign substance seems at all fastened, the better plan is to tie the eye up and wait until a surgeon can be reached. Too much effort at extraction and the playing of the lid over

the foreign body, has a tendency to increase the inflammation. Tying the eye up puts it at comparative rest. A handkerchief wrung out in cold water and applied to the eye has a tendency to retard inflammation. Always remember that the damage done by a foreign substance often makes the eye feel as if the object was still in, when really it has been removed.

FOREIGN BODIES IN THE EAR.

The only foreign body liable to give pain when introduced into the ear without force, is a live one. An active bug in an ear gives excruciating pain. This can be relieved by filling the ear with oil. The foreign body generally floats out on the oil, or at least is drowned thereby, and its means of producing pain, ended. If oil is not at hand use water. As soon as the suffering is relieved, let the ear alone, whether the unwelcome visitor is out or not. None but a skilled hand should take a foreign body from an ear, unless it is near the exit.

Chapter 6.

How to Treat Persons Suffering From Heat and Cold.

If hands or feet are frosted immerse them in cold water, gradually adding warm, until it is up to the temperature of the body—or nearly 100°. If a

person is suffering from general exposure get into a warm place; give warm drinks and wrap in warm blankets.

A person exhausted from heat, with a cold clammy skin, should be placed in as cool a place as possible—clothing removed, and stimulants given in small doses. If, however, the person is unconscious, with a hot dry skin, use cold applications to the head, neck and body, and summon the nearest physician.

Chapter VI.

How to Restore the Apparently Drowned.

FIRST.

Loosen the clothing at the neck, then turn the body on its face; straddle the body and lift it by the waist until one or two feet from the ground. This will let the head hang down and allow the water to run out of the nose and mouth.

SECOND.

Turn on the back with head as low or lower than the body and hands over the top of the head. Straddle again with face towards the drowned person's head, grasp the body by the sides just above the belt—over the short ribs—squeeze, and at the same time lift slightly, and press the hands towards the patient's head; do this steadily while

counting ten, and then let go suddenly; rest while you count five, then repeat the combined squeeze, lift, and push, and keep this up for half an hour; if by that time there is no sign of life, it is useless to continue. If at any time the person attempts to breathe, let him alone until he has taken a breath, wait a few seconds, and if the breathing is not repeated, squeeze, lift and push as before. *Don't be rough—keep back the crowd.* The writer came near fainting under a broiling sun, on a river bank, while working with a body, because the crowd surrounded him so closely—not much show for the patient under such circumstances.

The efforts at resuscitation must be made at once, *as soon as the body is taken from the water, on the water's edge.* Don't attempt to move to a warmer or better place if it be cold; wait until life is restored, then move to a warm place if at hand, wrap the body in warm clothing, and give warm drinks in small quantities. Hot irons to the feet, bottles filled with hot water, placed beside the patient, are valuable aids towards restoring strength, but take care not to burn the patient. The *first* thing to be done, however, is to revive the spark of life, and this must be done *at once.* Waiting for the body to be carried to a convenient or warm place may give the spark a chance to go out. Any after treatment should be administered under the advice of a physician.

Chapter VII.

How to Move the Injured.

It matters little what part of the body is hurt, if the injury is extensive, the injured person must be carried lying down.

A door with car cushions on it makes a good bed. When no passenger coaches are on the train, the cushions from the caboose and engine, or if there are none of these, whatever is available, can be used to soften the bed. When a sleeper is attached, there is, of course, no trouble about bedding.

Not only must the bed be made ready, but the injured person made ready for the bed. The pain in an injured limb is increased by moving it, therefore it should be made as immovable as possible.

When lying down, an injured arm may be placed beside the body, or bent at the elbow,—the lower half resting across the body. The nature and extent of the injury and the injured person's feelings, must to a large extent control the position of the arm. If one with a crippled arm can, or is compelled to sit up, some support should be

given to the disabled member. A sling can be used, or, better still, put the arm on a board, or a cushion in the lap. If the hurt is not extensive and the coat sleeve intact, this latter can be pinned to the breast of the coat and thus form a sling. If a thigh is hurt, it can be made comparatively stationary, by taking a piece of board (fence board will do) six or eight inches wide, and long enough to reach from the arm pit to the sole of the foot or beyond; place this board on its edge along the body and the injured leg; now put another piece of board on the inside of the leg—reaching from the crotch to the foot, or beyond. The leg is now between two boards; tie handkerchief, suspenders, rope, or whatever is at hand, around the boards, and fasten the leg between them. Or, better still, fold a quilt, or blanket, to a breadth corresponding to the length of the limb; then roll it tightly from each end, when you will have two cylinders; place the injured limb between, and then tie snugly to the limb. By including in the cylinders a stick, such as a walking cane, it will be all the better.

In lifting a broken limb, take hold of it firmly. Keep it well on the stretch; it is not probable that you will pull too hard, certainly not in a broken leg or thigh.

Where a leg is crushed, it is best to gently lift it and slip a car cushion or board under it, and let it remain there until a surgeon arrives, or the patient is transported to where a surgeon can be had.

What has been said in regard to the thigh, holds good in injuries to the leg below the knee, excepting that the outside board may be shorter.

The great effort should be not to hurt the wounded, but to make as comfortable as possible, and in order to do this, attention must be paid to their requests, if there be any made.

The railroad man will soon bring out every thing available on a train, and the comfort of the injured depends to a certain extent upon the kind of train at hand.

After the man and bed are ready, the next thing to do is to get the man on the bed. Place the foot of the extemporized bed or stretcher at the head of the person to be moved. If men are plentitul, place one at each limb and to the head. After all have a good hold, gently and *altogether* raise the body just high enough to be carried head first onto the bed, the lifters passing on either side of the bed. Never put the stretcher down by the side of the injured if it can be helped. Either carry the person head or feet first onto the stretcher on a line with the body.

The body being on the bed, the next thing is to carry it. Let four or six men gently raise the stretcher, and without keeping step, march. In stepping, step low and without any spring; try to carry on a level and without jarring. Don't climb fences but tear them down. In crossing uneven

ground, go slow and keep the stretcher level; if the patient is conscious, try to remove all fear of falling.

When carrying a person with an injured head *up* hill, have the head first, so the blood will not rush to the head. When carrying a person with an injured leg *down* hill, have the head first, so the body will not crowd down towards the leg, otherwise carry feet first. If the transportation must be on cars, the best and most comfortable plan is to suspend the stretcher by four ropes from the roof of an express car—there is spring enough in the ropes to counteract the jar. The feet should be towards the engine, and chairs or baggage should be placed under the stretcher, but not touching it, lest a rope should slip or break. One man can keep the stretcher from swinging too much. When no ropes are at hand, the stretcher can be placed across car seats, chairs, trunks, or even on the car floor with coats, straw or anything at hand to break the jar.

In removing clothing, always undress the sound side first, unless the clothes are sacrificed by cutting or tearing.

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