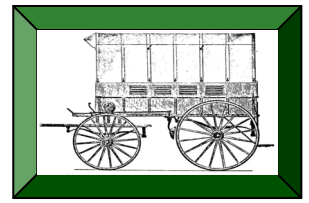


Leg Amputation

A Field Hospital Presentation



Leg Amputations

(Used with permission from the book: "Battlefields, Bibles and Bandages" by K. Jones)

Amputations are among the most gruesome and the most requested of surgeries. They are also the most difficult to prepare for and do by the medical team and require precision team work to carry them off. It is often the surgical nurse that is able to make sure the surgeon looks good in this particular technique. This is one that you and your surgeon will have to work together and practice before hand. The following is an equipment list in order of use:

Tourniquet: Used to stem the flow of blood

Long Catling : Double sided and pointed soft tissue knife used to cut skin flaps and cut through muscle and tissue.

Small sharp instrument of surgeon's choice: Used to pop blood and puss bags to enhance impression of actual surgery.

Tissue pullers (cloth or metal): Used to pull back tissues so as to allow surgeon to saw through bone without further damaging tissues and muscles.

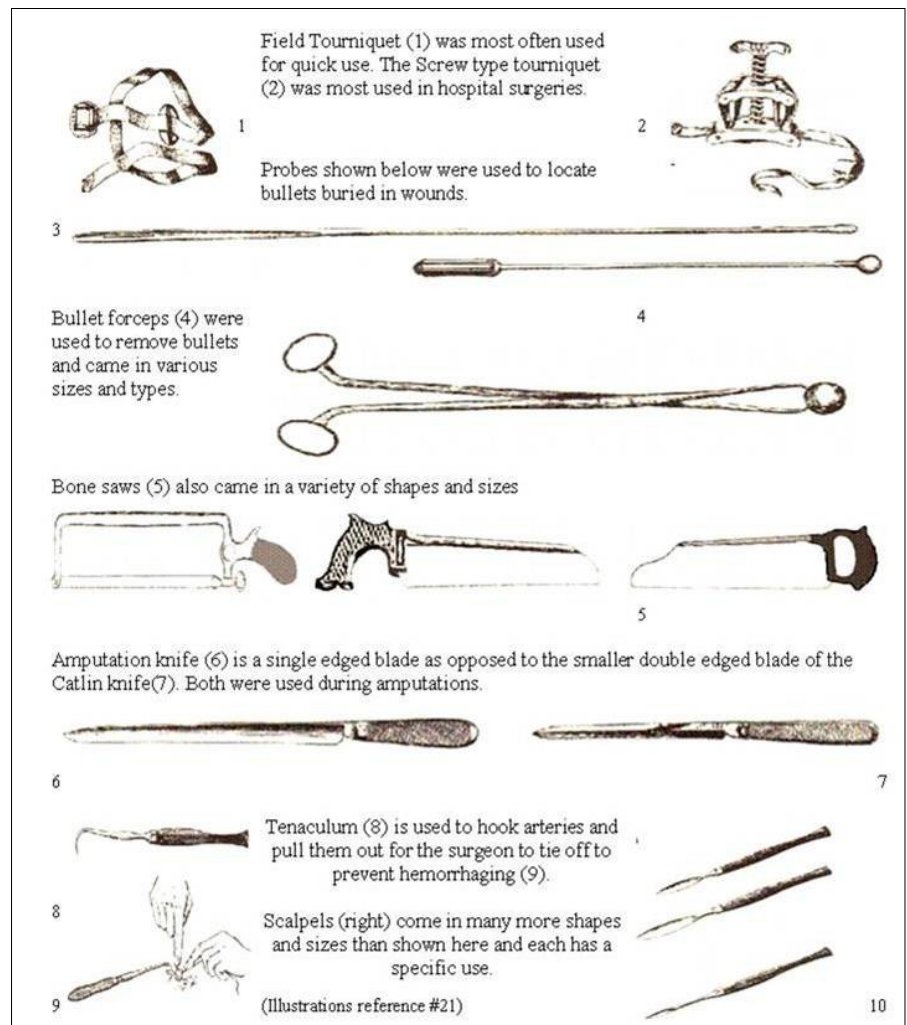
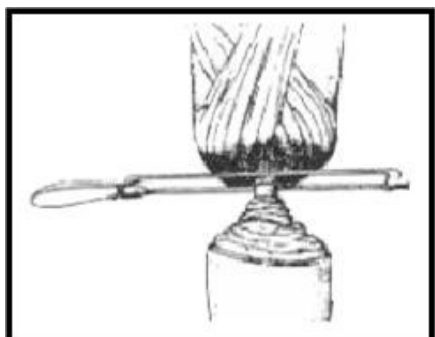
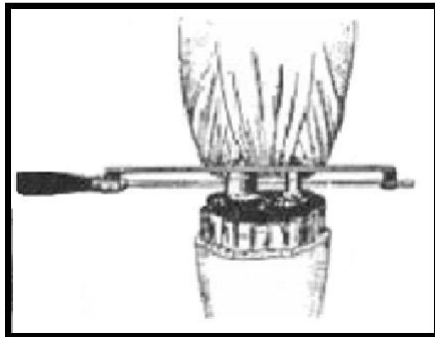
Bone Saw: To cut through bone.

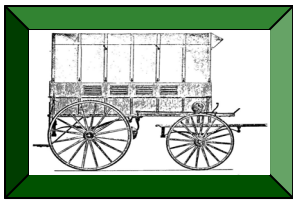
Tenaculum: Used to hook arteries and make them available to tie off to prevent hemorrhaging in wound.

Suturing material: Needle and silk thread or horse hair that has been boiled to make pliable.

Bandages: Created from cotton gauze material or ripping old sheets or muslin in 3" x 3 yard strips then rolled.

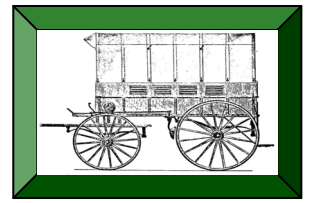
Also you may find a flask and sponge useful for administering an anesthetic such as ether.





Leg Amputation Page 2

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Preparation:

Fake leg or arm should be cut in area above the wound area created by moulage. On each end create two holes that correspond with each other approximately 1" deep. Cut 5" dowel rods the circumference of the holes these need to seat well enough to create at least a 3" gap between upper and lower limb parts.. These will create your "bones."

Drill a third hole in the upper portion of a smaller circumference that a plastic tube from an enema bag will travel through. This hole needs to go all the way through the prosthetic to allow bag to be hidden in upper area while tubing travels through hole down to gap between portions. The bag will hold blood that can be forced through the plastic "artery" by having the assistant or the surgical nurse squeeze the bag in pulsating pressures. This step can be eliminated if you find a squirting artery is too graphic for your audience.

The next step is to create the muscle tissue. Two 1 1/2" thick pieces of steak cut to size of limb circumference should do well. The cheaper the cut the better. Place the steaks on top of each other and cut an "X" where the dowel rods will insert through them. Between the two pieces of steak you can place blood or pus bags and your plastic artery should also be pushed through the top piece of steak so blood will squirt from meat area. On the end of the tube place a balloon with the round part cut off so that a tenaculum can be used to pull this softer part out of steak to be tied off with suture material. Cover the entire gap with either pig or chicken skin tied at each end with string tightly so skin will not slip.

The limb, now prepared for the presentation should be used quickly. The tricky part is to have it hidden under the table so that it can be placed and held by stewards while surgery is being undertaken by surgeons. The patient should be covered with a sheet or blanket to disguise the fact that he has the leg or arm bent out of the way and the fake limb is being held in place by assistants or strapped in place at the bend of elbow or knee. When draping the patient the blanket can be held up momentarily to block the view of observers while the artificial limb is being lifted into place.

Procedure:

If a cloth tissue puller is to be used it should be placed under leg first so that the ends can be pulled through the "bone" structure to hold the muscle out of the way for the capital saw to be used later. Tourniquet should be applied next to "stop bleeding" With a long catlin cut skin close to the edge of lower cut of artificial limb all the way around so that it separates. If necessary use a sharp scalpel to aid in this procedure.

Peel back skin as if peeling off a sock. Run catlin between the two pieces of steak as if cutting through muscle, puncturing any balloons of blood or puss as you go. Any not punctured in this manner should be either punctured with sharp instrument of choice or discreetly removed.

With tissue pullers hold back upper steak piece to expose the dowel rod "bones". A capital saw is then used to cut through the dowel rods.

Release tissue pullers next. If you have the fake artery set up ready your assistant should now begin to apply alternating pressure to create squirts of blood. Tell assistant to tighten the tourniquet. This will be the signal for him to stop the pressure. Using a tenaculum hook the balloon part of the "artery" and gently pull out into view and tie closed with suture material. Have assistant release tourniquet to "test the artery for leaks."

Once the lower part of the limb is disposed of out the sight of the audience you can begin to fold over the skin and suture it closed in a flap shape. Stewards or nurses should then bandage the "stump"

As I stated before, this is one procedure that will need practice with surgeon, assistants and surgical nurses together in precision teamwork.