AN INAUGURAL DISSERTATION
ON

Wounds

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Wounds

While improvements have been making in other departments of medicine, surgery has not been without a progressive tendency. And, in the treatment of no class of surgical affections, are these improvements, perhaps, more obvious than in wounds. Anciently, the most absurd ideas were entertained with regard to the proper method of treating them, as is shown by the employment of amulets incantations for this purpose. These superstitions, however, after a lapse of time were dissipated, and there came the application of cerates, unguents, camphor's poultices,
and various supposed vulnerary Compounds, all of which were thought to possess the power of hastening the healing process, and it firmly was this error engrained upon the medical minds, that it was not until the beginning of the seventeenth century, that its inconsistency was attempted to be printed out; but few then consented, and these various applications were continued until about the middle of the eighteenth century, when a reformation was wrought, which has been gradually improved upon until at the present time, a wound is viewed as being scientifically dressed, only when the prominent characteristic thereof is simplicity. A wound is
A recent solution of Continuity regardless of extent, and a wound is said to be of the incised, contused, gunshot GE variety, according to the phenomena characterising it, or the instrument of infliction. Thus and incised wound is one void of contusion and lacerations, with a surface greater than its depth, and inflicted by a sharp-pointed cutting instrument. We shall only speak of the incised variety. An incised wound has three phenomena characterising it—viz. pain, hemorrhage, and separation of its edges. The first is owing to division of the nerves; the second to injuries done
The blood vessels, and the third is the natural contractility of the parts. The hemorrhage may be arterial, venous, or both; when it is from arteries, it may be known by its bright scarlet colour, and from its flowing from saltum from the cardiac extremity of the vessel, while, if it be venous, its colour will be dark; and, it will flow in a continuous stream from the distal end of the injured vessel.

A wound of this class may heal according to the circumstances attendant, and the manner of treatment, by adhesion, growth, the modeling process, or by granulations through healing.
by growth or the modelling proces.
self, is of rare occurrence, because the
wound is most generally treated
with the view of causing it to heal
by adhesion, and when thus treat-
ed the edges are made to coalesce,
which combined with our pronen-
ness to morbide vascular activity,
accounts for the rarity of healing
by either of those modes, so, we
shall only speak of the healing
process, as taking place by the
first and second intentions. The

The treatment is both local and con-
stitutional; and in the employment
of the local means, we have three
indications to fill, viz. first to ar-
rest hemorrhage, secondly to remo-
Foreign matter, and thirdly, in bring and retain the edges in accurate contact. As in a wound in which there are no large vessels in jured, nature will most generally check all hemorrhage, but if the employment of artificial hemostatics becomes necessary, we may resort to the application of cold aided by uniform pressure; but on the contrary, should the continuity of a large vessel be disturbed, we must call to our aid the graduated compression or what will be more efficientligation. After the arrest of all hemorrhage, we should proceed to the removal of foreign matter which in wounds which no
large vessels have been injured, will usually be nothing more than a coagula of blood; and these may readily be removed with a fine sponge and water; but if a large vessel should have been wounded, and the Compress or ligature employed to arrest the hemorrhage, the esotic materials cannot be removed, consequently, accurate evaporation would be contraindicated, and we should be content with healing by granulation. But suppose the wound to be one in which the foreign matter has been merely coagula of blood, these being removed, we may proceed to the fulfillment of the third indications:
which, as before mentioned, is to bring
and retain the edges in contact.
This coaptation however should
not be effected immediately, but
we should wait until the edges
of the wound present a glazed ap-
pearance which appearance is
owing to the deposition of coagu-
able lymph, and increased vascular
action, having been set up for its
effusion. Now we have a wound,
the hemorrhage from which has
been stanched, void of foreign mat-
ter and presenting a glazed appear-
ance, which is precisely the
Condition in which coaptation-
tentive means are applicable.
These means are various, and
we should always select. Those esoteric praxines, the application of which gives the least pain, not only because of the anguish produced at the time of application but also on account of its increasing the already great tendency to inflammations; hence, where sutures are indispensably necessary, there should be no more used than the nature of the case absolutely requires. Preservatives and plaster are the chief agents for bringing and retaining the edges of wounds in contact; but where these means are not sufficient, sutures must be employed, and as these are of different kinds, the selection must be made accordingly, as the one
may appear more applicable than the others; thus, in extensive wounds of the abdomen, the quilting suture will be most efficient, as by it the deep parts of the wound will be brought in contact and healing will take place from the bottom; thereby preventing fistulas. While in wounds of considerable extent in other parts, the interrupted suture will best answer the purpose; these should be introduced through the skin and subcutaneous cellular tissue, the knot being applied not directly over the wound, but to one side so as to avoid the irritation. Now it would necessarily
Inocuous and these sutures may be used in connection with adhesive plaster, which should be applied in strips overlapping the wound, so as to support the subjacent fracts. Besides these means, there are others which have the desired effect in slight wounds, such as collodion, a solution of gutta percha in chloroform, the spirit gauze of H. Bidal, and the continued use into a deel merely through the cuticle. Now by some of the agents mentioned, the surface of the wound must be brought and kept in exact contact; when this is done, all motion of the part
must be strictly forbidden. The constitutional symptoms watched, and combatted by appropriate means; remembering that inflammation of an excrated character is the great enemy to adhesion by the first intention, as well as by granulation. Coaptation of the edges of the wound now being accurate, no other dressings are necessary, pass occasionally such as have a tendency to keep down inflammatory action. There will be a vascularization of the lymph previously effused; vessels will shoot out from each surface of the wound, and inosculate with each other, and these by inheating
a like office to that of those from which they spring, build up the breach with tissue resembling that of the surrounding parts. But should the surface, either from inflammation, or any other cause fail to adhere, the treatment for granulations must be adopted. We must no longer aim at complete coaptation, but allow free exit of pus, as its retention would endanger pyrexia; all sutures should be removed, nothing remaining but a strip or so of adhesive plaster. To prevent too great separation of the edges, if active inflammation be present, it should be subdued. For as long as it continues the organizible material will be
wholly converted into pus, and hence, no filling up of the defect will occur.

Particular attention should be paid to the state of the system; for if the
wound be large and suppuration profuse, the vital powers may become
so far overtaxed, as to render the administration of tonics necessary,
and stimulating applications to the wound indispensable; but should
the patient be very sphygmic, an opposite course should be pursued and
water dressing would now have a happy effect. The vascular activity
of the last, should be maintained at a medium between that necessary
for the mere effusion of lymph, and that of active inflammation,
so that a portion of the lymph so
effused will be converted into fine,
while the other will be metamorpho-
sed into red conical prominences,
which are granulations; these being
connected to the surrounding textures.
This process of effusion of lymph
and transformation of the same
continues, while those granulations
first formed are converted into
areolar tissue, and it in its turn
into tissue resembling that by
which it is surrounded, until the
chamber is filled, and then comes
the process of cicatrization which
completes the case. Cicatrization is
the process by which these granula-
tions, when on a level with the
surrounding parts are covered over. This covering, however, differs from skin, both in organization and appearance, and is seldom, if ever, so perfect. This integumental formation commences at those granulations in contact with the skin, its vascular activity being increased, probably for it to take on a secretory function, and this secretion in connection with the granulations, forms the cicatrix. Now while this new material is being formed and decreasing the quantity of unprotected granulations, absorption of the granulations themselves is taking place, so there is a diminution of this space in two ways.
and this absorption may continue after the complete formation of the cicatrix, so as to remove it entirely as well as the transmuted granulations, so that there will be no new matter remaining between the once separated edges. This entire removal of all new matter does not, however, as a general rule occur; but a portion remains to be incorporated with the contiguous parts, and in the course of time this amalgamation becomes so perfect that any difference in appearance is scarcely observable, save in the cicatrix, which, as it is a copy of a very complicated structure, seldom attains the same perfection of organization as the original.