merly were numerous; while, so far as I have had an opportunity of judging, the mortality has not increased. The operation is now resorted to, as a "*dernier resort*," or else only when most unequivocally demanded; while in former times, it was regarded as almost the first step in the remedial treatment of the case.

The following are the chief circumstances which, according to the rules of modern surgery, justify the operation:—

1. Compression of the brain arising from extravasated blood.

2. Compression of the brain arising from depressed bone.

3. Irritation of the brain caused by spiculæ.

4. To evacuate pus.

Injuries of the head, even of the simplest description, are always to be regarded as of moment; especially if these injuries be attended with concussion, which is always followed by a greater or less extent of reaction. The imminence of the case is considerably increased, if symptoms of compression are developed, either primarily or secondarily. And although in cases of the first description, there rarely occurs a necessity for operative interference, unless it may be for the purpose of liberating purulent matter, one termination of the inflammatory action which may supervene unless the cases be properly managed, in those of the second description it is most usually imperiously demanded. If the practice of the old surgeons has been characterised by rashness in the use of the instrument, and a far too indiscriminate employment of it, it must be confessed that modern surgery has probably rushed into the opposite extreme, that of not resorting to it sufficiently often, and trusting too much to the recuperative powers of the system.

Blows on the head, attended with injury of the cranium, and symptoms of compression dependant on depression of the bone, or extravasation from a ruptured vessel, are by no means of unfrequent occurrence; and, as in the trial alluded to, a question affecting the value of the operation as a preservative of life, is frequently proposed to a medical witness. It is true, that in the non-performance of the operation under circumstances demanding it, and in which a fatal issue results, the position of the accused party cannot be affected, inasmuch as the operation, if performed, *might* have proved successful, yet, as it is always impossible to tell the extent of cerebral lesion, a great degree of doubt must, even under the most auspicious looking circumstances, attach to it, and should therefore modify the opinion demanded. But how far, or to what extent, should this modification or reserve be carried? And what are the data on which such an opinion should be founded?

It is asserted, in the first place, that such data cannot be furnished, with any degree of certainty, from the symptoms developed in any particular case. In examining the *post mortem* appearances presented by the cranial contents of persons dying after injuries of the head, this assertion will be found to be most substantially confirmed. If compression be the result of extravasation, that extravasation is not necessarily below the seat of injury. It is not unfrequently found at some distant part—on the opposite side of the head; or the extravasation may be met with in the ventricles, from a rupture of a portion of the choroid plexus. These are circumstances which must not be lost sight of. If the compression again be the result of a depressed bone, as extravasation most usually attends such an injury, the same train of remarks will apply; superadded to which we have to take into consideration, in consequence of the severer injury, the possibility of a lacerated cerebral substance, and more or less speedy formation of pus—a result of the inflammatory action with which such cases are almost certainly attended. Or if the compression be due to pus, where are the unerring signs to be found, so surely indicating its *locale*, as to permit us to say positively that by the application of the crown of the instrument, it *will* be liberated? Occasionally we may judge accurately; but is this always the case? Symptoms afford but fallacious evidence. They prompt certainly to the adoption of the operation, but afford no substantial ground on which to base anticipations of any positively favourable issue.

It is asserted, in the second place, that the operation itself is not devoid of danger. It may have been successfully performed, as far as the object to be attained is concerned, and yet may be inductive, by its very performance, of injurious consequences. A simple fracture is by the operation converted into a compound one; nor is the degree of a compound one by it lessened. Inflammation, with its consequences, is very liable to supervene; while a hernia is a by no means unfrequent consequent.

If, then, the symptoms of any particular case can furnish us with no sufficient evidence to warrant us in a conclusion respecting a successful application of the trephine, which is but another expression for its value; and if the mere operation itself be not unattended with danger, what are the data on which we may establish an opinion as to such value? Surely not on isolated cases in which the operation has been successfully performed; because it is exceedingly improbable that two individuals will suffer in precisely the same