factory for any operative work above the waist-line, even in the hands of the most accomplished expert.

The safest and most reliable drugs are two—stovaine and tropococaine. To these strychnine or adrenalin may be added. It must, however, never be forgotten that these drugs are protoplasmic poisons and that they have a marked affinity for the tissue of the central nervous system, rapidly forming with their tissue-protoplasm, compounds more or less stable. The contention is that within the subarachnoid space the drugs act directly upon the naked nerve roots and not upon the conduction tracts of the cord itself, so that a simple nerve-block is all that is produced. But unfortunately there is no guarantee of this, and even the optimism of Jonnesco admits a certain proportion of untoward after-effects—of headache in 6.25 per cent., retention of urine (described as transitory) in 4.5 per cent., fæcal incontinence in some cachectic feeble individuals 4 per cent., and a slight rise of temperature in 50 per cent. Be it remembered moreover that even a transitory headache means a rise in intracranial pressure, due to an increase in the cerebro-spinal fluid and accompanied by all the phenomena of a reactive inflammation. In a word a headache is an early meningitis. And the roof of the fourth ventricle is only pia mater, and fenestrated at that, and within is the Holy of Holies. Cocaine in the subarachnoid space is a deadly drug. With the use of stovaine and tropococaine there have been few recorded deaths—some 4 in 5000 cases, though Professor Rehn of Frankfort has shown that in animals the high injection even of these drugs is acccompanied by considerable danger.

The prudent and only justifiable method of inducing spinal anæsthesia at the present day seems to be this: Use only stovaine or tropococaine, alone or combined with strychnine or adrenalin. Make the solution small in bulk, 1 c.cm., and nearly isotonic with the cerebro-spinal fluid; warm it to the body temperature, and inject it slowly and always at the seat of election, namely, between the 3rd and 4th lumbar vertebræ. So administered it is safe, and there is a definite though limited field for its employment. It is sufficiently satisfactory only for operative work below the waist-line and is specially adapted for cases where an inhalation anæsthesia is contra-indicated, and other local anæsthesia is difficult or impossible. Such cases are prostatectomies, operations upon the rectum, anus or perinæum, and all radical work upon the lower extremities. It is claimed for it that it will prove a useful adjunct in military surgery, and though *a priori* it promises well in difficult parturition, its employment in such conditions has been hitherto extremely limited.