

Therapeutic Notes

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Therapeutic notes.

While some drugs at present included in the B. P. are of little or no therapeutic value, while other valuable drugs in constant use by some practitioners are still ~~not~~^{not} included in the B. P., it is the part of every medical man to watch & ponder over his experience of his own use of drugs, & it is always his part to communicate to his fellows any point or points of value medicinally which he may have observed in applying a drug to a new use, or in using an old drug either in an uncommon way or in a new combination. We all have the same remedies wherewith to work, but the success or failure of a man therapeutically depends largely on his inclination or disinclination to try old or new remedies in new ways or in new combinations. Nothing is more unsatisfactory & retarding to therapeutic progress than the habit of prescribing stock mixtures for stock diseases. Too many medical men keep a supply of ordinary prescriptions in mind, & when the disease crops up, the remembered prescription comes into use. Doubtless it is impossible not to have some remembered prescriptions, but to treat every case - say of Acute Pneumonia or Acute Bronchitis - by one stock formula can do nothing but bring failure occasionally, narrow the therapeutic horizon of

the prescriber, diminish his usefulness, & prevent advance in therapeutics altogether. Each patient ought to be regarded as a patient & not as a case, for, while there are similarities in individual cases of the same disease, one seldom fails on careful examination to find also marked differences - differences which may seem slight, & which some may think do not require a modification of the treatment, & yet it is the slight modification of the treatment in these individual cases which shows the educated physician & the successful practitioner.

Books on therapeutics repeat one another as regards the value of some drugs which are utterly valueless, & nothing can be more disheartening to a young practitioner than to try again & again, & find to fail absolutely, a drug which in all the standard anti-books of therapeutics is put forward as a remedy for the particular ailment. Such has been my experience with not a few drugs. On the other hand, there are valuable drugs, the value of which is too much ignored, & which are prescribed far less frequently than they would be, were the indications for their successful use more widely known.

The facilities for research into the minute physiological

actions of drugs are not given to all, but every practitioner -
however humble his sphere - can carefully watch the dosage &
therapeutic value of remedies. That is the side of the question
to be treated in this paper. It should be stated, moreover,
that the opinions here put forward have been arrived at
from the use of the drugs mentioned - not once or twice merely,
as many patients recover from ailments, independent of any
good the remedy may have done them, or even a spite of
positive harm it may have done. Every drug enumerated
has been used at least many hundreds of times, so that
coincidence cannot be accepted as a plea for the
beneficial action, as some sneering Surgeons would try
to make us believe. Text books & lectures have been used
as guides to the administration of the remedies, & as aids in
watching the details of their action, but so far as possible
I have kept my mind unbiassed, & attributed to the drug
no more than its due. Utopian & magical effects from the
use of drugs exist too often only in the mind of the charlatan;
but that good therapeutic effects result from the use of
many drugs, even the most sceptical must allow. The
middle, & right course, of attributing to the drug nothing
more than its actual value, can ^{best} only be its right use, &

will do much to prevent disappointment. Disappointment in the use of drugs for cases which have been wrongly diagnosed is a just retaliation for the blunder; disappointment following the empirical use of a drug in a case which cannot be diagnosed cannot be great; for little can be expected from such working in the dark; but disappointment from the use of a recognized remedy in a case, the diagnosis of which is plain, is doubtless much more often due to the physician's carelessness than he would be willing to admit.

Digitalis. For certainty of action, I have found no drug to equal this. Its failure when prescribed in appropriate cases is quite exceptional. It has been well called "the sheet anchor of cardiac therapeutics". It is only in cases of cardiac disease accompanied by a tangible pathological lesion that it exerts a beneficial action; for it is of great service in some functional disorders, in which the heart is supposed to be in an obscure way affected.

In many cases in which precordial pain is complained of by young chlorotic women, whose hearts are found on examination to beat somewhat irregularly, 1/2 gr. doses of *St. Digitalis* three daily, with the local application of *Implast. Belladonnae*, greatly relieve the severity of the symptoms till the prescribed course of iron has had time to show its effects. Palpitation due to a weak heart with a low or normal blood pressure is markedly relieved by 10 min. doses of the tincture of *Digitalis*: palpitation due to a hypertrophied heart & a high blood pressure is aggravated thereby. Sleeplessness due to precordial pain & palpitation - as in the above mentioned cases - also yields to 10 min. doses of *St. Digitalis* three times a day.

In both forms of mitral disease, in the late stage of aortic

regurgitation, in aortic stenosis with imperfect compensation,
& in tricuspid regurgitation due to an emphysematous condition
of the lungs, digitalis in full doses is of the utmost value,
especially when combined with nuxvomica - 10 minims of the
tincture of each drug three daily, or oftener if required. Sometimes
the digitalis requires to be given in much larger doses, but it is
well to begin with about 10 minims & increase the dose as
required. I have occasionally given 20, & sometimes even
25 minims of the tincture of digitalis every 4 hours for
48 hours where smaller doses failed: nothing but good
effects ever followed. As iron acts on the blood, & arsenic
on the skin, in many diseased conditions of these tissues, so
digitalis braces up a struggling heart & gives tone to it.
Its action is very noticeable even in a short time. Thus
within 24 hours I have observed a heart, at first quiet
weak, irregular, & causing painful palpitation, become
slower, stronger & more regular, & act free from pain.
Dropsy, due to a weakened action of the heart, generally yields
readily to rest & digitalis, with good nourishment &
stimulants if needed, the best stimulants being brandy,
or whisky, or Sp. Aeth. C. if the stomach will tolerate it:
Thousands of lives are saved yearly, & many more are prolonged

indefinitely by the judicious use of digitalis.

I used to understand that digitalis was valuable in particular organic cardiac lesions, but experience has proved to me that its use is far more extensive than that; indeed I have often prescribed it with great advantage in cases with somewhat indefinite symptoms, in which most men employ Gammie's Iron Tonic - conditions, for instance, of general relaxation of the muscular system such as not infrequently follow overwork or worry. Rest is almost invariably a *sine qua non* in the use of digitalis. In cases without detectable cardiac lesion, where the urine is scanty, loaded with urates, but free from albumen, good results are got from the use of digitalis, either alone or combined with Potash Citrate. Digitalis alone ^{the diet being also carefully regulated.} in these cases ^{Succeeds} much more often than citrate of potash alone; the combination, however, yields the best results. A mixture upon which I rely a great deal contains ℞. Digitalis M \bar{x} , ℞. Fer. Sulf. M \bar{v} , Potash Citrat. ℥ \bar{x} , Infus. Calumb. ad ℥ \bar{ss} , - to be taken three times a day in half a tumblerful of cold water, after meals. Where iron is required with digitalis, the ammoniac citrate may be added in 10 gr. doses. The above formula, or perhaps better still is the old formula containing ℞. Digitalis, ℞. Fer. Acetate, and Potash Citrate.

The freshly made infusion of digitalis has been lauded by some as more astringent than the tincture; others say the opposite is true, & this is my own experience. Jay's pills have not in my hands been more successful than the tincture of digitalis.

The objections urged against digitalis are more imaginary than real. Its cumulative action, of which one hears & reads so much, I have never seen, although I know several patients who have been taking ten minims doses of *Ext. Digitalis* three daily for several years. Some few people it certainly makes sick, & very occasionally it causes diarrhoea: I saw this latter occur again & again in a case of advanced mitral regurgitation with passive congestion of the liver & jaundice whenever digitalis was administered. Sometimes too, it impairs the appetite without causing actual sickness. Several patients have complained of feeling very drowsy while taking digitalis - they feel like persons taking *Pod. Brown*.

In very few cases do we require to fall back on the cardiac tonics. If the stomach is very intolerant of digitalis, *Strophanthus* may be tried, but citrate of caffeine - especially the granular effervescent form - is better to agree. Digitalis, however, should be resumed at the earliest possible moment.

Strophanthus, *Convallaria* & Caffeine sometimes yield good

results, but in many cases they fail. One is driven back upon Digitalis. To try the others, & fall back upon digitalis if they fail, is a tinkering with therapeutics, which no rational practitioner will ever practise.

Every elegant form for the prescription of Digitalis in combination with tonic remedies is the following -

R. Gr. Digitalis $\overline{3\text{ij}}$.
Syrup. Castor. $\overline{3\text{vj}}$
Syrup. Ferri Phos. Co. (Parrot) $\overline{3\text{i}}$
Aq. ad $\overline{3\text{vj}}$

Si. A tabaspoonful in a wineglassful of water three daily after food.

Opium. My experience of this drug has shown me 3 different types of individual susceptibility. In the first instance I used it very largely in a colliery practice, where most of the patients were strong & robust. & with very few exceptions, the drug - in whatever form administered, the most common being Puls. Opium. C. was well borne, & exercised its narcotic & sedative effects very efficiently. The fact that Dover's Powder - the most nauseous form in which opium could be given - was well tolerated, was an indication of freedom from stomach disorders & weak nervous systems. This preparation acted most efficiently in relieving the catarrhal form of Influenza, & severe colds were quickly checked by the administration of from ten to fifteen grains of Dover's Powder twice, with an interval of 6 hours; in most cases nothing further, beyond a purgative, was required. Nausea & sickness, dryness of the mouth & throat, & headache were very rarely complained of, while vomiting of the medicine was quite exceptional. In an epidemic of choleraic diarrhoea too - about 40 cases daily for 7 weeks, Dover's Powder in 10grs doses with 10grs. doses of Bisulph. Carb. repeated every 4 hours for 24-72 hours, with total abstinence from food & drink, except a little weak tea or thin barley water & the judicious use of a little brandy in some cases, was a

most successful method of treatment: Linseed & mustard
poultices were also applied every 3 hours over the stomach region
in order to check the vomiting which always accompanied the
diarrhoea. Opium in powder or in pill I found most useful
in intestinal colic during the spasm. Opium pills (gr. i) I used
with advantage in many cases of labour, where a rigid os made
the labour both painful & prolonged; this drug very soon
overcame the rigidity, & allowed natural pains to come on,
with a consequent satisfactory progress in the passage of the
child. It was also found to be very useful in the last stage
of labour, when the head was delaying a rigid perineum, as
it overcame the spasmodic contraction of the perineal muscles.
The tincture of opium & the morphia preparations I had little
occasion to use at this time. In diarrhoea, either in
children or adults, with more or less unaccountable bleeding
from the large bowel - a condition which seems to be termed
dysentery by many practitioners - opium in combination with
tannic acid acts very well indeed - much better than
either drug alone: this is a most valuable combination for
this condition. I am in the habit of giving to an adult. Puls.
Jum. Op. gr. i, with Acid Tannic. gr. i every 4 hours.
Proportionally smaller doses I have used in the case even

of children below a year, who were perfectly emaciated & exhausted by the continued looseness of the bowels & loss of blood. Great care was of necessity taken in watching the action of the opium on these children, but I never saw aught but beneficial action accrue. I check diarrhoea due to an irritant, after the irritant has been expelled, fr^o opium generally succeeds

My next experience of the use of opium was in Glasgow, where I found most of the people less tolerant than the last group, but much more tolerant than the group which I shall mention next. I had occasion to use morphia much oftener than opium, sometimes in mixture, sometimes hypodermically. In a good many cases the usual doses caused headache, dryness of the mouth & throat, & aurescia, & in a few, retention of urine. In one case I gave according to orders fr^o $\frac{1}{2}$ morph. Sulph. hypodermically: it had been given previously on one or two occasions. The commencement of its action was coincident with the withdrawal of the needle; the patient complained of fiddiness & throbbing in the head, & in a few minutes she was perfectly delirious; this continued for some hours, & was succeeded by a long & quiet sleep. No bad result followed, but I should scruple to repeat the experiment, as I believe smaller doses repeated would

have acted equally well, & with less risk. The case was one of acute Endometritis in a virgin; & this was the sole treatment. & it was successful! It was to me a new way of treating acute Endometritis.

In cases of advanced phthisis, with constant irritating cough & sleeplessness, minute doses of morphia give excellent results: $2\frac{1}{2}$ to 3 M. of liq. morph. Hydrochlor. three or four times a day along with \mathfrak{z} of Parrish's Syrup or other wine. It has a surprising effect -- for a time at least -- in bracing up the patient, & making his short remaining span of life more comfortable. In Haemoptysis, too, there is nothing to be compared with $\mathfrak{f}\frac{1}{4}$ of morph. Hydrochlor. every 4 hours; the benefit to be derived from these of astringents is more than doubtful. In the palliative treatment of submucous or polypoid fibroid tumours of the uterus, $\mathfrak{f}\mathfrak{i}$ of opium has an excellent & speedy effect in relieving the spasmodic contraction of the uterus upon these tumours, which I have not infrequently seen to occur at intervals of some weeks in women past the climacteric. The effect was by no means curative, but most women, even though they object to operative treatment -- are grateful for speedy relief from a most excruciating pain.

The third class of people in whom I have observed the action of opiate is millworkers, mostly dyspeptic, many of them tubercular, & resident in a valley. They are very intolerant of opiate. Sickness & vomiting, headache, intense thirst, constipation, & nervous excitement are - one or other - the almost invariable sequels of the administration of opium or its preparations. Morphine salts have similar bad effects - without the constipation - except when given in the minutest doses, e.g. M^{ss} of liq. morph. Hydrochel. At least 90% of the opium administrations are followed by these bad effects, so that the anodyne properties of the drug, when these are displayed, are compensated for by 24 hours or more of nausea & absolute incapacity for work. Instead of sleep, in many cases, I find morphine to cause wakefulness, even though freedom from pain is experienced. Probably this is owing to the low tone of nervous system which largely prevails.

Hyoscin. This is the narcotic which I use here mostly, instead of opium. Of the three salts - the hydrobromate, the hydrochlorate, & the hydroiodate - the first is most often used, being given either in solution, or by preference hypodermically. An average dose to commence with is $\frac{1}{150}$; this can be increased up to $\frac{1}{50}$ or more, but the dose must be increased carefully, & with a knowledge of the susceptibility of the patient.

While this drug has in most cases little or no action on the heart; in a few it does depress the circulation slightly. Its narcotic effects are powerful, much more so than those of morphia, & they are shown quickly. Like opium it dries up the secretion of the salivary glands, but on the other hand it diminishes the secretion from the sudoriferous glands, & when given for a time dilates the pupil, its mydriatic action being also speedily & powerfully shown on the instillation of a 1 in 200 solution into the conjunctival sac: it then raises the intra-ocular tension, like atropine. It is to quiet nervous & muscular excitement that Hyoscin is chiefly used. Thus for ordinary insomnia, though it is harmful, yet it is much too powerful a drug to use unless as a last resource. To alleviate pain it is often invaluable, being used as morphia is used in similar

conditions. Thus in Delirium Tremens, in very bad cases of Paralysis Agitans & Chorea, & in Acute Mania, it is most useful: indeed in the last, there is no drug to compare with it. It gives relief from the lightning pains of locomotor ataxia, is said to have been used with success in the Status Epilepticus, & is certainly very serviceable in some cases of cardiac insomnia. It is a very powerful, but a very reliable & safe drug, & is worthy of a place in the B. P.

℞ Liq. Hyoscinæ Hydrobr. (1 in 1000) ℥i℥
Syr. Aurant. ℥i℥
aq. ad ℥vj
℞. ~~℞~~ A tablespoonful as directed.

A convenient strength for hypodermic use is 1 gr. in 10 ℥:
Dose M 3-8.

Bismuth. The carbonate of Bismuth in doses of $\text{ʒ} \frac{10}{15}$ is the most-reliable & convenient preparation of Bismuth for general use, owing to the frequent necessity for combining the bismuth with Lucei Bicarb. In action there is no appreciable difference between the carbonate & the subnitrate. The Liquor Bismuthi et. Ammon. Cit. is a very interesting preparation. In prescribing Bismuth. Carb. in powders along with Lucei Bicarb. - a useful combination for Subacute or even Acute gastritis. & for the vomiting of Pregnancy - the addition of a few grains of Sacch. Lusi. to each has a carminative action on the stomach & aids in the expulsion of some of the gas which so often accumulates in these cases. For Chronic gastritis or Dyspepsia in its atomic form Bismuth does little or nothing; sometimes it relieves the feeling of fulmen for a time, but its use has to be continued to keep that up, & in a short while it loses its action altogether. Perhaps the most-reliable use of Bismuth is for the retching that follows the emptying of an overloaded stomach; here in $\text{ʒ} \frac{10}{15}$ doses every 3 hours - along with the use of cataplasms - it may be almost- absolutely relied upon. When pain is a feature of the gastritis, the Bismuth may be advantageously combined with $\text{ʒ} \frac{1}{2}$ Hydrochloric of hydroph. Combinations which I have found very useful in treating Chronic dyspepsia are - ; Bismuth. Carb. $\text{ʒ} \frac{10}{15}$. Pepsin. Preci $\text{ʒ} \frac{10}{15}$ after

each meal, even though it is generally taught that Pepsin ought to be administered with acids. \mathcal{R} Bismuth. Carb. $\text{gr} \text{ } \mathbb{V}$, Lactopeptini $\text{gr} \text{ } \mathbb{V}$, after each meal - a most valuable combination, one which has done me good service in the treatment of gastric ulcer, as after its use in some 20 cases the haematemesis, pain & vomiting have invariably ceased, & with the other usual adjuvants of treatment of this ailment the cases have gone on to recovery: I always continued the powder for three months after the patient was going about. \mathcal{R} a combination which I have used more recently, but more frequently, is Bismuth Carb. $\text{gr} \text{ } \mathbb{V}$, Pepsin (Fubler's) $\text{gr} \text{ } \mathbb{ii}$, three daily in water after food: in every case in which I have prescribed this, the patient has experienced relief, occasionally partial, often complete, & the continued use of the powder for 3 or 4 weeks, gradually diminishing from three to one daily, effected practically a cure. Prior to the use of this, I could rely upon ~~nothing~~ no drug or drops to relieve the feeling of weight & fulness which so many dyspeptics complain of after taking food.

In diarrhoea of a not very extreme type, following the expulsion of an intestinal irritant with *Op. Ricini*, Bismuth Carb. $\text{gr} \text{ } \mathbb{V}$, with *Op. Chloroform. et. hydroph. M \mathbb{V}* every 3 or 4 hours has acted very well. It is very serviceable too in Infantile

Diarrhoea, where the stools are natural in colour, especially if there be vomiting at the same time.

For Acute Oedema which is burning & itching no ointment affords such relief as the Unguent: Bromul. olea. It may be used alone, or combined with an equal quantity of Ung. Tinci Benzoi. Many Subacute Oedemas too, especially of the face, are quickly made well by the application of this mixed ointment night & morning: the addition of a few grains of calamine makes its use for the face less objectionable.

Papain. (Funkler's). It is a most unfortunate occurrence that so important a drug as this is non-official. Those who, like myself, have failed an indefinite number of times with undeservedly lauded drugs like pepsin, & who have been driven to regard certain forms of stomach disorder as almost irreparable, must reckon their first acquaintance with this drug as a godsend. The puffing which many remedies like this receive, rather deters a medical man from trying them, but the despair begot of frequent failure in trying to aid slow or imperfect digestion, induced me to try this as a last resource. My early experiences with Papain, as with Bromidia & Hydrochlorati of Apomorphia, I can never forget. No doubt one's first brilliant results from the use of a drug in cases previously deemed hopeless or helpless, are apt to lead to an over-sanguine estimate of their value, but even this is no alarming error, for it but leads one to prescribe the drug with more than ordinary confidence, & the confidence of the practitioner in the prescription often tends greatly to the patient's benefit. A drug which a medical man has little faith in - & alas! there are too many such - he cannot recommend warmly to a patient, this lack of enthusiasm being apparent to the patient, the latter

commences to take his medicine with the minimum of hope, & generally ends with the minimum of good result. On the other hand we can be quite enthusiastic in recommending some drugs, having every confidence in their beneficial action: & our enthusiasm begets like enthusiasm & confidence in the patient, both of which act most beneficially in aiding the therapeutic effects of the remedy.

I have been led to speak thus because this remedy is relegated in books on therapeutics to a very inferior position, & one which it by no means merits.

In cases of dyspepsia where the supply of gastric juice is deficient, the food taken lies heavily in the stomach, & causes uneasiness or actual pain, as well as headache, constipation, foul mouth, general lowering of spirits, languor, &c. All the standard works on therapeutics recommend pepsin with hydrochloric acid in such cases. In the many cases in which I have watched it, success was quite exceptional. Better results followed the use of Bismuth Carb. in mixture with Vin. Pepsin., after Bismuth itself had been tried for a long time & failed. Subsequent to my failures with pepsin, in powder & as Liquor Pepsinis (Beyer), I tried Lacto-peptine (Richards) & found it a much more reliable drug when given in fr 10-15 doses

three daily, after meals. While pepsin in powder often caused sickness & vomiting, lactopeptine never did so. I was in the habit for a time of ordering lactopeptine in $\text{gr} 10$ doses with $\text{gr} 10$ of Bismit carb. As I have already said, I got excellent results from this combination in a few cases of gastric ulcer, warranting further trial. It also did very well in some cases of dyspepsia. But as it often failed. I at last tried Pepsin, in the faint hope of getting some good action. It far exceeded my hopes, for while there are seemingly suitable cases for its administration in which it does little good, they are very much fewer than with the other two remedies already mentioned. In $\text{gr} 2$ doses, with or without $\text{gr} 10$ of Bismit Carb. & $\text{gr} 5$ of Sod. Bicarb., it aids digestion remarkably. The weight, dulness, swelling, & oppression after food so often complained of by dyspeptics generally soon disappear when pepsin is given for some weeks, the diet, bowels, & general hygiene being of course carefully regulated at the same time. Another most important use to which I have put the drug is this. In convalescence from severe & prolonged illnesses, one of the worst features with which we have to contend is the weak condition of the stomach, as shown by lack of appetite, especially for very nourishing food.

This condition is frequently met with after Influenza, especially that form which has intestinal & gastric complications. The appetite is very poor, & an endeavour on the part of the patient to take esp. eggs or flesh meat or strong soups, is often followed either by vomiting, or by such discomfort as forbids any further attempt. Were this to last for only a few days, it would be of no consequence, but if it continues ^{weeks or} for months, & that in spite of all kinds of acids & bitters. Convalescence is in consequence very protracted. But if for doses of pepsin are administered after each meal - consisting of very nourishing food - the patient digests & enjoys the food, the natural appetite returns, convalescence is shortened, & recovery is much more satisfactory. It is certainly a kind of forced feeding, but the results are good. Even in chronic invalids, great improvement in strength can be obtained by giving more nourishing food than the patient was in the habit of taking, & inducing assimilation by the administration immediately after the meal of this powerful digestive agent. Further in the gastro-intestines of bottle-fed children, who want a great deal of curdled milk, & pass loose white or green motions, $\frac{1}{2}$ doses of pepsin, with Bismuth Carb. for &

Cube Root of 3; twice or three times a day after the bowels are cleaned out by a calomel purge, yields very good results.

It is a very nice experiment to show in a test tube how pepsin with hydrochloric acid liquefies boiled white of egg; but it is much more satisfactory to have a drug which will stand the test of practical experience. Such a drug is pepsin, & such I have not found pepsin to be.

Ingluvin.

This drug has been pushed as a remedy for all kinds of stomach disorders. Doses of 10-20 grs. are said to be useful in chronic dyspepsia, & in obstinate vomiting - especially the vomiting of pregnancy. My own results have been most disappointing. Like scores of other remedies it has failed often in the vomiting of pregnancy, & seldom succeeded. I have not been able to come to any other conclusion than that its digestive power is nil.

Tonicum. This is the most generally useful of the bitter wines. Its value is best seen in cases of nervous exhaustion, e.g. following Influenza, or one of the Specific Fevers, where the listlessness & anorexia tend to prolong the convalescence. Tonicum seems under these circumstances to stimulate the appetite along with the digestive function, when given in doses of ℥ss-℥i of the tincture three or four times daily, after food. As a general tonic also after almost any chronic ailment, Tonicum is of much service, especially when given in such a combination as Easton's Syrup. This form often agrees & can be easily taken, when *St. Mac. Tonicum* & *Hyd. Strychninae* Hydrochlor. disagree with the stomach; indeed now that this preparation is standardized by the B.P.C. - though different from the old Easton's Syrup - it forms an almost ideal tonic. Its effects - if haematinic effects are desired - are much enhanced by combining it with equal parts of Parrish's Syrup, a fluctuating article certainly, but one upon which the B.P.C. have not improved. In cardiac cases markedly beneficial effects follow the use of digitalis combined with the tincture of Tonicum in ℥ss doses 3 or 4 times a day, for the Strychnine is an excellent cardiac tonic, aiding the action of the digitalis. A mixture which often affords great relief in advanced cardiac disease with renal insufficiency, is:

℞ Potash Citrat. ʒvi
℞. Digitalis ʒij
℞. Nuc. Vomica ʒi
℞. Am. aut. ʒiv
Aq. ad ʒvi s. s. m.

℞. A tabulospoonful in a wineglassful of cold water - every 4 hours.
In cases where the tincture of digitalis had been continued for months without any very apparent result; I have seen the heart improve rapidly on a mixture like the above, the dropsy disappearing in a very short time, the urine increasing in quantity, & becoming free from albumen, & the dyspnoea being greatly relieved.

In advanced Chronic Bronchitis, with Emphysema, where the heart is failing, a mixture with Ammon. Carb. ʒi, ℞. Digitalis ʒij, & ℞. Nuc. Vom. ʒi - every 4 hours, is often of the greatest service, the Styracine seeming under the circumstances to act as a true expectorant.

In chronic dyspeptic conditions, with anorexia & sluggish bowels, Bismuth Carb. with ℞. Nuc. Vom. is sometimes useful; or a laxative pill may be given containing ℞. Nuc. Vomica ʒij, Aloes Cos. ʒij, Ferri Sulf. ʒi, with or without ℞. Casca, Lax. ʒi. - to be given every 5th night.

In four cases of overdose by Styracine which I have seen, instead of convulsions - which are said to be usual - each patient complained of absolute loss of power over the

lower limbs - they were in fact temporarily paraplegic. One
of these patients took ʒi of Liq. Strychni Hydrochlor - having
drunk at one time half of a six ounce mixture containing ʒi
of Liq. Strychni Hydrochlor, the dose directed being a dessertspoonful.
He recovered - as did the others - without treatment of any kind.
The three other patients took ℥ss of Liq. Strychni Hydrochlor, three
times in one day - a tablespoonful dose instead of a
dessertspoonful - though on all four occasions the directions
were plainly written & attention called to them by the dispenser.

Ergot. Either the haemostatic effects of ergot have been much exaggerated, or the scope of its action must be limited. It is a remedy which has been lauded for Haemoptysis, Haematemesis, Pseudo-haemiplegia; it has also been recommended for bleeding Submaxillary Glands. In no case of the above type in which I have tried it - & they have been numerous - have I seen it have any effect whatever, except in a very few cases causing constipation. For passive haemorrhages (venous), its use is quite irrational, for if ergot contracts the arterioles, it certainly does not contract the veins - though some say it does - & consequently it but draws more blood into the veins & tends to increase the bleeding. Ergot, however, is not without its therapeutic value; indeed it is a most valuable drug, but ^{is} much abused one.

In labour cases, Professor Murdoch Cameron's dictum that "Ergot should never be given till the uterus is empty" sums up the matter in a nut shell, as an examination of the various conditions shows.

To primiparae who are in labour, no one ever dreams of giving ergot; because the dilatation of the passages must be effected slowly & not spasmodically.

In multiparae, in the first stage of labour, ergot does sometimes - and only sometimes - bring on the pains or make them stronger, but - how? The natural pain begins slowly &

increases in force gradually, the contraction of the uterine muscular fibres taking place in quite a regular & uniform way. The induced pain on the other hand is an irregular contraction of the whole uterus at once, & it comes on very quickly, & passes off as quickly. Thus in the former case, the pressure applied to the child is gradually increasing & harmless: in the latter, it is a sudden crush, which is by no means likely to be beneficial.

Again, if ergot is used, the undilated neck of the uterus is felt to be hard & rigid, its muscular fibres being contracted spasmodically by the action of the drug. Now a spasmodic contraction of the cervix uteri sometimes occurs naturally, & should it do so we generally use means to relax it. Thus by using ergot we bring on the very condition, which under other circumstances we try to remedy. With an os, too, in this hard condition, should the spasmodic force behind it suffice to expel the child, it will certainly cause a laceration of the cervix, a not infrequent result of ergot administration. Should the pains fail, time & patience are the best remedies. Should there be spasm of the os, ^{fit of} opium repeated in 2 hours, affords marked relief. If in many cases instead of trying to force on nature, an opiate were given, & rest secured till a vigorous labour commenced, the results of midwifery practice would

be much more brilliant. We would see fewer split-cervices & fractured perineæ. The cessation of the pains is in most cases a call on nature's part for rest; & we cannot do better than imitate nature as closely as possible.

In the second stage of labour ergot can certainly be used with time-saving benefit if the passages are soft & dilatible, but its use for such a purpose is questionable ethically. In giving it there is always a risk of rupturing the perineum, because the force which it causes some woult to exert is enormous. It is also the commonest cause of the low-plan uterus, the placenta being generally retained in the upper segment.

Sperm of the vaginal outlet also sometimes follows the use of ergot; thus further delaying the labour & inducing a state of matter which, when occurring naturally, we use remedies to overcome.

In the third stage of labour ergot is never required, & even then if given is liable to cause low-plan contraction.

After the placenta is expelled, ergot may be given if indicated, e.g. by a lax uterus or tendency to hæmorrhage; it can in any case do no harm, though it is seldom needed, if the uterus is properly manipulated after being emptied.

The dangers in using ergot in labour may be thus summed up:

In the first stage - 1 harmful pressure on the foetus, 2 Spasmodic contraction of the os, & consequent delay in the labour, 3 rupture of the cervix, 4 rupture of the uterus.

In the second stage - 1 Spasm of the vulval outlet, 2 rupture of the perineum.

In the third stage - 1 long & slow contraction of the uterus, & retention of the placenta.

The use of ergot in abortions is in most cases bad practice. It may do something for the time being to stop the haemorrhage, but it makes the cervix too rigid & prevents the foetus from getting away. In more than one case I have assisted at an abortion where the administration of ergot had expelled the foetal head, ~~which~~ ^{the piece} however ~~was~~ ^{being so} lightly grasped by the os uteri as to retard further delivery. Chloroform was required to relax the spasm. Plugging the vagina & waiting is much more satisfactory treatment for abortion than ergot; in some cases, of course, the placenta has to be removed by the curette.

In threatened or actual post-partum haemorrhage ergot is generally given & is seen to be useful; it is reasonable to think that it should be so. I have no experience of it.

In menorrhagia, however, in young women, probably due to excessive ovarian activity, half dram doses of Ext. Ergot. Liq. with $\frac{ss}{10}$ of Olan. Brand. three daily yields excellent results, & is in many cases an absolute cure for the anaemia which these regular & profuse losses of blood induce.

For ovarian hyperaesthesia, 30gr. of Olan. liq. is most serviceable, as it also is in some cases of metrorrhagia. I have not found ergot useful in the latter of these conditions.

In Internal Haemorrhages in general ergot is not a serviceable drug. Its results, when it alone is relied upon, are disappointing, nor is this to be wondered at. It is said to contract all the blood vessels. If it does so, & if the contraction at the place of leakage is sufficient to close the torn vessel, good & well; practice however shows that it is rarely equal to this. When it does not do this, the contraction of the blood vessels simply drives the blood with more force through the point of rupture. One can illustrate the principle with a rubber tube which has a small puncture through which water is ~~flowing~~ being forced. If the water pressure is increased, ^{from behind} or if the tube is diminished in calibre by pressure, the escaping jet rises to a greater height & a greater quantity

escapes; but if the vis a tergo is diminished the quantity escaping is less. This teaches the means of trying to control uterine haemorrhage - it is by staying the force of the circulation.

Drugs like aconite or antimony may be useful under such circumstances, but morphia is the best of all; it not only quiets the circulation directly, but it also lessens the excitement of the patient, & so, indirectly, still further quiets the heart.

Viburnum Prunifolium. The fluid extract of this drug in $\mathfrak{z}\bar{i}$ doses three daily, or preferably the solid extract in doses of $\mathfrak{r}\mathfrak{s}$ - $\mathfrak{10}$ three daily, has an action in cases of threatened abortion, either for a first time or habitual, which no other drug possesses. It seems to control the reflex phenomena of uterine contraction, which not infrequently occur regularly in the early months of some women's pregnancies, & which also cause such alarming symptoms in spasmodic dysmenorrhoea. I have seen some 20 cases in which women, who had previously aborted twice or oftener in spite of rest & the use of other uterine sedatives, have by the regular use of $\mathfrak{r}\mathfrak{s}$ doses of $\mathfrak{z}\bar{i}$ Viburn. Prunifol. in pill three daily from the second month onwards, been able to carry their children to the full time, going quietly about their work all the while. The difference between the woman who lies in bed on low diet for six months & the one who goes about all the time with the aid of a simple remedy, is most striking. Fear food is afforded by it; here also in many cases of spasmodic dysmenorrhoea.

It is sometimes of service in checking false labour pains, though generally Opium Prunifol. $\mathfrak{r}\mathfrak{s}$ $\mathfrak{a}\mathfrak{d}\mathfrak{d}$ or $\mathfrak{z}\bar{i}$ doses of Bromide are more successful.

It has been advised for ^{all} uterine haemorrhages, but I have not seen it of much service except for the haemorrhage of threatened abortion.

Liquor Carbonis Detergens. This patented concentrated alcoholic solution of coal tar is recommended by the maker for almost every form of external or cutaneous lesion. To expect it to have such manifold effects is to court disappointment; but in certain cases of skin disease it stands unequalled. My own experience of it is limited to its use in dry, chronic eczemas. In such cases where tar is indicated, & where unguent: picis - however diluted - aggravates rather than alleviates the intolerable itching, the use of Liquor Carbonis Deterg. either in ointment - e.g. Ung. Suplei. $\mathfrak{z}\mathfrak{i}$, Liq. Carb. Det. $\mathfrak{z}\mathfrak{i}$ (or more or less according to the cutaneous condition of the individual), or in the form of lotion - $\mathfrak{z}\mathfrak{i}$ or more or less to $\mathfrak{ss}\mathfrak{j}$. of water, to form an emulsion - to be applied on lint covered with fatty percha tissue or jaccnet. & changed night & morning, is often most beneficial, the thickened skin which forms being washed off once or twice a week with black soap & water. It is a weekly occurrence with me to have chronic eczemas, which have been treated for months or years with the remedies, yield in a few weeks to this treatment, which is particularly applicable to eczema of the arms or legs. For chronic eczema of the face, jaw, & throat - which is so common & so recurring - I have seen nothing to equal an ointment.

containing $\frac{3}{4}$ or more acres of Liq. Carb. Det. to $\frac{3}{4}$ of Ung.
Hydrarg. Nit. Dil. - to be applied night & morning, arsenic being
given of course in gradually increasing doses in all cases,
& sometimes of. hooch. as well. One intractable case of
senile eczema of all four limbs - of three years duration,
& all that time under skin specialists, was treated by
the walking dressings mentioned above; as the patient had
initial neuropathia, with oedematous legs - he was 84 years
of age - I gave him $\text{M}10$ of $\text{R}x$. Digitalis, $\text{M}10$ of $\text{R}x$. huc. Vom., &
Odan. Ci. for 80 thrice daily after food; in three months his
skin was perfectly smooth, & he is now going about quite
well. The greater the infiltration, the more likely the
walking dressings are to succeed.

It is scarcely possible to put more than $\frac{3}{4}$ of Liq.
Carbon. Det. in $\frac{3}{4}$ of Ointment.

Ichthyol. My experience of this remedy is limited to its use in
Eczema, acne rosacea, & erysipelas. For Eczema I have used
ichthyol in 10% solutions, as unna's zinc-ichthyol gelatine (2%)
& as unna's zinc-ichthyol salve muslin. Of these the latter
are the best, & of the two I prefer the gelatine. It is applied
daily at first & covered with a bandage & cotton wool or
lint. It is especially valuable for eczemas - acute &
sub-acute - of the legs & arms. The muslin is better adapted
for use on the face, though for localised patches on the arms
or legs it is also an excellent form of treatment.

For most cases of ^{Ordinary} Rosacea, the internal administration of
3 capsules of Ichthyol (4 grains ^{each} of the ammonium Ichthyol)
daily, with the local application ^{night & morning} of Ungt. Sulph. Iodii, freshly
made, is the best treatment. This of course is not likely
to succeed if the hyperaemia is great.

For erysipelas, especially of the face, the quickest remedial
measure in my own experience is equal parts of Ichthyol
& vaseline or lanoline smeared thickly over the part, night,
morning & covered with cotton wool. The diseased skin
soon becomes well, & this ointment has certainly an action
in preventing spreading of the disease.

Resorcin. This is a remedy also which I have used only for cutaneous ailments - psoriasis & chronic eczema. For those cases of psoriasis in which chrysarolin fails, we generally fall back on pyrogallic acid or resorcin. A very elegant way to use it is as human plasticine which contains 15 grammes of resorcin in $\frac{1}{2}$ sq. metre. This is also a most useful application to superficial, i.e. early, epitheliomata, where operation is objected to. Or an ointment (20-30% in vaseline) may be used. In chronic eczema it may be used as lotion, mull, or ointment, the strength varying with the case up to about 10%.

Derivat. The sub. gallate of Bismuth, a yellow, insoluble powder like iodoform but without its odour, is a valuable dry dressing for excoriations in general & for ulcers. It may be used alone or mixed with powdered starch, being dusted on two or three times a day. When applied to superficial sores like ulcers, leg ulcers, burns, &c, it forms a bland, unexciting dressing, drying up the discharges, acting as an efficient antiseptic, & aiding cicatrization. The fact that it is non-poisonous allows of its use in the case of large surfaces, e.g. burns, where iodoform would be dangerous. It is one of our very best remedies for soft chancre, when sprinkled freely over the sores & covered with a thin piece of cotton wool. For ulcers it may be used as a dusting powder - the better way - or it may be made up into an ointment with vaseline, $\text{ʒij} \text{℥} \text{ʒij}$ in each ounce.

I have not used it yet internally.

Indol. This is rather a disappointing remedy. It has been advised as an adjuvant substitute for iodoform, but it bears no comparison ^{with} it. It is much inferior to DermatoL even. I have used it occasionally for P.M. Chancre with success, but it is chiefly for chronic middle ear disease that it is useful: 6 grains of Indol, 20 grs of Acid Boric., 3i of Glycerum. & Rectified Spirit. ℥- $\frac{3}{4}$: 10 to 15 drops to be poured into the ear each night. This often causes the parts to heal quickly.

Laryngeal insufflations of the powder for Empyema Laryngitis, have in the few cases in which I have tried them been most unsatisfactory.

Creolin.

A $\frac{1}{4}$ to $\frac{1}{2}$ % watery solution of creolin makes an excellent & safe vaginal or uterine injection for use after labour, or for vaginitis & gonorrhoea. As a general dressing for wounds it is inferior to carbolic acid, though for large surfaces where there is a susceptibility to carbolic acid, it is a most useful substitute. For foul swelling sores also it is a good deodorant. As an antiseptic it may reasonably be ranked with Carbolic Acid & Bichloride of Mercury.

Diuretin. In doses of 15 grains every 4 hours this remedy has considerable diuretic effect in cases of renal & cardiac dropsy. As every practitioner meets occasionally with cases which are obstinate to all the older remedies, it is thus a valuable addition to our list of drugs. Under diuretin in cardiac cases, the secretion of urine is generally increased & the dropsy diminishes; digitalis then comes in to strengthen the heart & prevent the re-accumulation of fluid - that is in cases where it has been unsuccessful at first. In the dropsy of nephritis - acute or chronic - diuretin will not only increase the quantity of urine excreted, but alter its character; thus the total amount of albumen passed in the 24 hours is in nearly every case found to be diminished, sometimes so markedly so as to be scarcely appreciable.

Beyond sometimes upsetting the digestion, it has ordinarily no bad effects.

Creasol. & Juvascol. In the form of coated pills (e.g. Richardson's Mij pills), I have in many cases found creasol to pass through the bowels & be discharged per anum undissolved, & on administering the pills in such cases cut into pieces, I have almost invariably found them to derange the stomach, & cause either anorexia or vomiting. But when they are retained & dissolved, they afford strikingly good results in the treatment of early phthisis, relieving the cough, expectoration, night sweats, promoting the digestion, & altogether improving the well being of the patient. For fermentation going on in the stomach, & flatulency due to a similar cause in the bowels, creasol is far superior to β . naphthol, ^(in doses of 5-15 grs) though as an intestinal disinfectant creasol in keratin coated pills sometimes does remarkably well. Creasol in capsules & mixtures very often leads to such disagreeable eruptions that patients will not continue it. When added to a solution of Salicylic acid in collodion for the local treatment of Lupus Vulgaris, it greatly mitigates the severity of the application.

In cases of Phthisis in the early stage, 3-4 doses of Juvascol in mixture or capsule - preferably the latter, or better still for 5-20 doses of Juvascol Carbonate, yield the best results of any medicinal treatment. A short course of this medicine, combined with the other hygienic measures ordinarily adopted

in early phthisis relieves the cough, expectoration, night-sweats, the appetite is generally improved, the patient puts on flesh & is able to go about in a quiet way. Short of climatic change, this is at present our best remedial measure. It is a very decided step in advance of the old method of general tonic treatment.

Sulphonal, Trional & Tetronal. These three drugs are closely allied in composition. If one methyl group in Sulphonal (diethylsulphon-dimethyl-methane) is replaced by one ethyl group, we get diethylsulphon-methyl-ethyl-methane or Trional, & if both the methyl groups in Sulphonal are replaced by ethyl groups we get diethylsulphon-diethyl-methane or Tetronal. The similarity in composition extends also to their therapeutic actions. All three are pure hypnotics, having no analgesia or other effects, except in the case of Sulphonal which is also an antihydrotic. Its action is especially beneficial in phthisis, in which sweating & insomnia are so frequently combined. But while these three substances act similarly, they have also differences. Thus Trional, which is much more soluble in water than the other two, & which is freely soluble in spirit, acts much more quickly than they do; in from 15 to 30 minutes its action generally begins, whereas an hour or more commonly elapses before Tetronal acts, & often more before the effects of Sulphonal are shown. Sulphonal is the least soluble & the slowest in its action. To obtain its action most quickly, it should be given in a hot-spirituous solution, such as whiskey or brandy toddy. Probably from the slowness with which it is absorbed & consequently acts, we get some explanation of its protracted action. Thus it is

a common experience of mine to find that sulphonal if given two hours before bedtime causes the patient to have a night of rest, disturbed by dreams; on awaking, he feels quite stupid & dazed, as if drunk, & probably talks nonsense for some hours; but on the following night he has a good sound, dreamless sleep, & awakens quite refreshed. I have never seen this occur when either Trional or Telonal was given. The staggering gait - two sometimes observed after sulphonal I have not seen with the others.

As none of these substances has any appreciable effect on the circulation, respiration, or digestion, they are most valuable for simple insomnia, the insomnia of phthisis, typhoid fever, cardiac & renal disease, chronic bronchitis, & old age, while for sleeplessness from whatever cause in children they are simply invaluable. For the insomnia of the various forms of insanity accompanied by great excitement, & for delirium tremens they are quite unreliable - hyoscin is here the remedy.

The solubility, quickness of action, & smaller dose, as well as its freedom from bad effects, lead me to prefer Trional for general use. It can be given up to 30 grs. or more. Telonal is generally given in doses of 15-20 grs. & sulphonal up to 60 grs. The cumulative action of sulphonal I have never seen.

Potain. Bromidum. This is a safe, but a very uncertain hypnotic. To have a hypnotic effect it must be given to adults in a dose of 40-60 grs., & repeated in an hour or two if required: 30 grs. doses are seldom of much service. Beyond the acne which it produces in anaemic persons, & the slaying fat - if long continued - it has no bad effects; though where the heart is weak, it has quite a depressing effect upon it. Sometimes the addition of Lig. Rosae M.S. to each dose of bromide prevents the acne; much more frequently it has no appreciable effect.

For menorrhagia in young virgins, ʒjss of Potain. Bromid. with ʒj of ʒij. Solut. Lig. thence daily, generally give good results. In menorrhagia due to ovarian congestion, ʒjss of Potain. Brom. with ʒj Decoct. Alves C. thence daily, generally affords relief. The Alves aid in depleting the uterine congestion. At the menopause Potain Brom. in ʒjss doses thence daily is invaluable; it greatly relieves the headaches, flushings, & menorrhagia so frequent at this time, & tends to ward off hysterical manifestations; it is well given with Decoct. Alves C. ʒj. or Magnesia Sulph. ʒjss & ʒj. Capsici M.S.

In rachitic children of 8 or 9 months, one often observes a restless & feverish condition, popularly attributed to teething, but really a warning of convulsions. If such a child - which

generally does not get better for long after - is left alone, convulsions almost inevitably supervene, but if after a hot-bath the bowels are cleared out by an injection or calomel, & a mixture of *Pod. Brn. frs'* with *Sp. Aeth. hit. Mv* is given every 4 hours, the convulsions generally soon subside, & the child returns to its usual health. This being much below par, demands careful instruction from the medical man regarding the diet & general hygiene.

There is another condition generally accompanied by more or less distressing reflex symptoms, viz: pregnancy. Abdominal pains in general, & vomiting due to the pregnancy, are relieved by *Podan.* *Brn.* in *frs* 15-30 doses when all other remedies fail. For the vomiting of pregnancy I have tried all the ordinary remedies - oxalate of cerium (which is quite inert), bismuth, hydrocyanic acid, small doses of nitric, soda bicarb., effervescent mixtures, nuxvom, champagne, &c. There is none so reliable as *Podan. Brn.*: indeed if it fails, there is little chance of the other succeeding. A very elegant form in which to prescribe, *Podan. Brn.* with *Chloral*, *Hydrocyanus*, & *Camphor Indica*, is *Batte's Brn.*, which yields results by no means commensurate with those of its ingredients separately, & has the further advantage of being easily taken, & not being liable to upset the stomach. It is indeed one of our best hypodermic mixtures.

For Acute or Subacute Endometritis, it is a most valuable medicine.
I treat a case of *Selenis* with a successful termination with
Pot. Brom. & Chloral Hydrate $\bar{a}i$ for \bar{v} every 2 hours: the patient was
12 years of age. See *Lancet* for January, 1894.

Chloral Hydrate: This is a most nauseous drug, many patients vomit it as soon as it is taken, but in the form of Bromide it is generally retained. The dangers of chloral seem to me to have been much exaggerated: beyond an erythematous eruption I have seen no bad effects follow its use. To call it a dangerous drug because its use in weak heart-conditions is followed by collapse is as foolish as it would be to call digitalis a dangerous drug because its administration in hypertrophy of the heart with high tension pulse is accompanied by untoward symptoms. The case is quite unsuitable for the remedy.

I have used chloral chiefly for convulsions - infantile & puerperal, & always with good results. In very violent cases of chorea, large doses of chloral with the steady administration of arsenic is the best treatment to secure rest, & prevent the exhaustion which otherwise supervenes on the continued movements & want of sleep; Potass. Bromid. is not to be relied upon. Of course the cardiac condition must be carefully observed before the chloral course is commenced. In Delirium Tremens, ʒi. of chloral with ℥ij. Hydrotin. $\text{℥} \frac{\text{xxv}}$ every 3 hours is quite a safe method of treatment if the patient is not weak & broken-down: if he is, hypodermic is indicated.

Chloralamide & Chlorobrom. These are two hypnotics, without
analgic action. While Chloralamide in doses of 30-60 grains
dissolved in warm water & spirit takes longer time than chloral to
act - generally about an hour - & while it occasionally causes
headache & sometimes fiddiness, it has little tendency to depress
the circulation or to upset the digestion, as chloral does. Further
there is no necessity for increasing the dose when its use is
frequently required, as the toleration which morphia & chloral
induce is never shown. When combined with an equal
quantity of Potash Bromid. as in Chlorobrom, it forms an excellent
remedy for simple insomnia, & the insomnia of phthisis,
old age, typhoid fever, & several cases of Delirium tremens.
I have found it useful too in the vomiting of pregnancy.
In Epilepsy, when the bromides fail or begin to lose their action,
Chlorobrom in doses of ʒi, three daily for an adult, usually
does well. For children, too, it is a good remedy, where with
to combat bad cases of whooping-cough & chorea; it may
be given ^{three daily} to a child of 2 years. I have not used it in the
insomnia of heart-disease or in sea sickness.

Urethane. In doses of 10-60 grains urethane acts as a rapid hypnotic. A natural-like, dreamless sleep generally follows its use. On awakening there is none of the stupor such as sulphonal & sometimes chloral-causes. It is a most useful hypnotic for children, having no apparent bad effects. In several cases of cardiac insomnia where potan. bromid. was useless, & where opium was inadvisable owing to lung complications, & where sulphonal caused merely mental wandering without sleep, urethane in fr 30 doses produced quiet sleep without any ill consequences. In one case of acute mania, too, supervening on acute Rheumatism with Endocarditis, 30 gr. doses of urethane every 4 hours kept the maniacal symptoms in check after potan. bromid., Sulphonal, & morphia had failed. In such a case I would now be inclined to try hyoscin.

Sonal, or Ethyl. Chloral-Urethane, acts very like urethane when given in doses of fr 30-40. I have used it much less frequently than urethane, but I have not seen any bad symptoms to contra-indicate its use as a hypnotic.

Phenazonum, Acetanilidum, Phenacetinum, Exalgin, Thallin.
The differences in the actions of the first three drugs of this class are far less than is commonly supposed. While Antipyrine is very soluble, & Antifebrin & Phenacetin are very insoluble, in water. & consequently likely to be less quickly absorbed, there is scarcely any appreciable difference in the rapidity with which they act. Sometimes Antipyrine succeeds where the others fail, but this is quite exceptional. It is for neuralgia, neuralgic headaches, & catarrhal headaches that these drugs are most frequently prescribed, but it is in migraine that the results are most striking. 15-20 grs of Antipyrine or 5-10 of Antifebrin, or 6-12 of Phenacetin, seem to act as an absolute specific for this distressing malady. The peculiar fiddly-like feeling sometimes complained of after Antifebrin, & less often after Antipyrine, has never occurred in my experience after Phenacetin. This substance, while acting like the others, seems to be milder & much more kindly. I have never seen any bad effects follow its administration to adults in doses of grs, & consequently for general work I prefer it to the others, especially in the catarrhal form of Influenza: it does not leave the patient nearly so depressed as the others do. Its combination with gr 3-5 doses of quinine enhances its value for this condition.

In simple catarrh, occurring either in adults or in children, any of these drugs acts very well. The high temperatures of typhoid fever & pneumonia, & the more moderate pyrexia of phthisis pulmonalis, are generally under the control of these remedies, which exert their antipyretic effect without in any way influencing far bad the other symptoms of the particular malady. In some cases they relieve the gastric & lightening pains of locomotor ataxia, but like all other remedies they sometimes fail utterly. If occasion arises for the use of Antipyrin in diabetes mellitus, it is generally found to reduce the excretion of sugar, sometimes very markedly; but its action is only temporary. Antipyrin too is an invaluable drug in some cases of dysmenorrhoea, complicated with severe headache, 10 grs. every 4 hours. Its use here is quite empirical, as it may act well in one, & have no action in another, of two apparently identical cases. Women often discover its value for themselves.

Five grain doses of Etalgin, dissolved in spirit, 3 times a day or often if required, act analgesically pretty much as Antipyrin, Antifebrin & Phenacetin do, only its action is more powerful. As an antipyretic it is seldom or never used, because ordinary, & safe, doses have little heat-reducing action.

It is for neuralgia in almost all its forms that ecalgin is most useful. Thus it relieves migraine, supra-orbital & facial neuralgia, intercostal neuralgia, sciatica & lumbago; the stinging pain of herpes zoster, & the lightning pains of locomotor ataxia also often yield to it. During its administration, the quantity of urine passed is diminished, & in diabetes it acts like antipyrine.

Thallin in doses of 3 to 8 grains in watery solution acts as an antipyretic, but as the fall in temperature is generally sudden & rigors often occur, it is not much used for this purpose.

It gives no better results than the other antipyretics, & on the whole is much less reliable, & more disagreeable to take.

Bougies or autothores containing $2\frac{1}{2}$ to 5% of sulphate of thallin used once or twice a day for some days, with or without injections of a 1 to 2% solution in water, yield excellent results in chronic proctocola & fistula.