1859

P. John Norman.
Ergot of Rye
Secale Cornutum.

This is the diseased seed of the Rye (Secale Cornale). We shall first give
a short Botanical description of the
plant which bears this seed. Then pro-
ceed to speak of the ergot.

Rye belongs to the Natural Order
Gramineae. One of the most important
in the vegetable kingdom, as it supplies
more to most animals with the chief article
of food. It is an herbaceous plant, with
a round, hollow, jointed stem, bearing al-
ternating leaves with stipled sheaths, small
colours or ligule where they join the sheath.
Spikelets two flowered. Flowers little in
Two rows on opposite sides (dust-sheets) with a rudimentary third terminal one. Names two animals as armed with a partial scutum three opposite. Other two, lower armed, unequal sided broadest at the side, of both a heel. Stewart & Oliver Opium Trade.

Two stationary terminal nearly alike, flattening both firmly toothed hands. Scales bordered with slight hair entire. Carpoptis heavy at the point above. Names as above. Calacras.

I shall now give a very brief sketch of the history of Egypt. It seems to have been unknown to the ancients for the mention of it is made in their writings. Opinion differs as to the first vote on the subject. There are held forward by different authorities, viz. Licinianus, Sigebert de Gramblon & Mendelica Thalins - The knight seems to give Sigebert the priority, who he says wrote before it in 1096. However Egypt seems to have been visited by women for stimulating the action of the uterus during labour, long previous to its use by the medical
faculty, in Germany, Italy, and France. It was supposed to have produced a pet 
plague in the year 1089 in the eastern 
parts of Russia; where Sigebert in his 
book says, "Many persons became sick, 
in consequence of their inward parts being con 
taminated by St. Anthony's fire. Their limbs once 
potato became black like coal. They either 
starved miserably or deprived of their hands 
or feet, were reserved for a more miserable 
fate. Moreover, many cripples were afflicted 
with contraction of their stumps.

Men have various accounts of the ravages of 
the disease produced by ergotized grain, in 
different parts of the continent; particularly in 
France and Germany, from the ninth century 
to this in the last one or two of them, 
which I transcribe from Mr. Wright's treatise to 
show the mode of attack and 
symptoms of this strange malady.

Mr. Jones in F.A. Scire give the following 
description of the effects of ergotism which 
were seen in 1722 in Silicia in 1723 near Berlin.
And in 1736 in Krefeld.

The disease commenced with a disagreeable sensation in the feet, a tingling or itching, a violent cardialgia, then came on. The disease ascended to the hands and head. The pains in a short time subsided, the head became heavy. Vertigo prevailed. The eyes appeared to have a thick moist before them. The patient then complained of extreme heat which was attended with thirst. The fingers and hands were spasmodically contracted, that no ordinary force could straighten them. The pain was described as equalizing sensation. Some became totally blind and others had double vision. The memory also failed. The conversation was cold and unintelligible. The movements staggering and awkward. Some became maniacal, some melancholic, others comatose. The disease was usually accompanied with opisthotonos, an abundance of saliva tinged with blood, or coloured greenish yellow, poured from the mouth. The tongue was frequently so much swollen as to impede
Articulation. The greater part of those who had epileptic fits died, such as experienced sensations of coldness, rigidity of the limbs, consequent upon subsidence of the itching, had the distension of the hands and feet. Following on these symptoms was an intractable appetite, for causing any desire to food. One had buboes in the neck, which discharged yellow-purulent matter accompanied by violent burning pains. Another had spots on his feet resembling the wings of flies, which remained during eight weeks. One had the face covered with spots. The pulse without exception was the same as in health. The disease continued for two, four, eight, or sometimes more for twelve weeks, with occasional intervals of respite. Of 300 patients under the notice of Simeon 300 infants perished.

Dr. Simeon experimented on a young pig. For the first 5 days the animal had to have the foot forced into it, though later food was denied with the foot, but after this
period he swallowed during one month three parts of the Katrina daily, without any sign had he any desire to give off any. At the commencement he seemed perceptibly, but on testing away the bowels with the intention of giving him more freely he which there was one third of Egypt he acted to grow. At last his belly only augmented, which eventually became large of hard. At the end of 5 days his legs began to p Median and inflame, breeding a great fluid of disagreeable odors, which grew rapidly worse. The parts under the belly blackened, the hair from dropped, but the above t urinary evacuations were ordinary in quantity of natural in kind. After having eaten in the space of a month two barhills of age, (Olmans Measure) containing one third of Egypt the was put upon pure bran in the form of a tepid mash; but this change of food failed to re-establish them; the person had accomplished its effect. Although the Animal at first appeared a little better, he soon evidently the subject of pain in his intestines; his health
was constantly throtting, the process of life gradually declined, until their final termination in death. On opening the body, part of the face being cut away, the pumice and especially the chine were found inflamed. The acute members of the face presented two large dark coloured spots. Under the forehead on the legs, were some unhealthy open tumours, from which issued a dark purulent discharge. These were gouts of the fleet.

I may here observe that in the first account mentioned as that given by Sigisbert de Gannay, the St. Anthony's fire may probably have been some form of inflammation of an Asthmatic type, depending only very remotely on the infected seed. I may infer that when this grain was used, there was a scarcity of food in the land. How want of sufficient quantity as well as quality will bring on many diseases, inflammatory disorders of a low form among the rest. Again the years in which Egypt was produced in most abundance, were remarkable for
Much pain, with want of food, that we know would favour the production of malarious
poisons to arrest the ague in the skin effect
which have been accused to it. In the decay
from given by Mr. Bates & Socie. want of
proper nourishment, without any poisonous
matters being added to the sweat & sweat-
ious fluid used by the poor, would produce
many of the symptoms there described— as
Purigo, &c; or tinged with blood when a
stream the blood coming from the gum. Also
the itching which may be seen in Purigo, a
disease frequently depending on the use of
improper aliment. Red spot on the feet
which may be seen in Purigo, Hemorrhage.
Selled's experiment however proves very
clarly that ague is the chief agency in pro-
ucing the above mentioned distinguishing
signs of diseases. But where is authority like
Whitby on this subject states that: "His
own experiments by the means correspond in
remarkableness both those reported by conti-
nental writers on the same subject," lic
Must occur with caution all that has been stated on the former influence of Egypt alone, but consider other concurrent circumstances connected with it—such as climatic influence of plant of proper productions that, as reducing in the small degree, the number of these spores (if the weed may be called) for which Egypt alone was blamed.

The Physical Character of Egypt—
The fact of Egypt's manner of its production, have long been disputed points among botanists; although there can be little doubt as to the existence of the bed, till the mode in which it is formed may long be a matter of debate.

The following is a description of the beds which presented at an early stage, while still growing on the plant: A black white coating, that could be brushed off with care, had much the appearance of some kind of pollen. Dr. Hall says that this consists of Eospora which are mixed with minute particles called by him Eosotaxis Clos
seeds. A sweet fluid is to contain phormia to be found in the flower. At the last process the tours get darker, it is easily turning gradually disappearing. The full grain top to top presents a curved shape not like a cock's spur, it may be round, though often somewhat angular, having a groove running the length, which corresponds with the one on the bound grain; two or three others pass from end to end. Transverse cracks may also be seen. The grain may run length from three or four lines to near an inch, some are said to be longer; the breadth also varies from half a line to five lines. A large quantity has a disagreeable fetid smell, suited the least for food better. The taste is rather acid.

The number of grains on each spike varies, there may be from two to twenty. When the number is few they are larger, as also are the bound grains. The plant has a healthy appearance, when the little are numerous the grains unaffected with disease are white at it a black powder covers their upper extremity.
Claus observed that a little animal fed on the egot, which he called Ceara Egota, he says it is about 1/4 the size of a cheese-mite, and lives in the interior of the grains. When these are broken, instead of presenting a clear fracture of a slight pinkish hue, numerous perforations are observed filled with the fibrous products of this little creature. Egot should be kept dry and in bottles well stopped, for its activity is much impeded by the atmospheric moisture of the insect above mentioned.

Claus has the power of preventing the production of this insect and the new time. Not interfering with the activity of the drug, the most certain way of having egot of good quality is to replace it by new every year. This egot viewed under the microscope presents cells in close conjunction with each other, which contain much oil matter.

As I observed before, many different theories as regards the production of egot han
been given. It will be unnecessary to introduce them all in this paper. Still a few may be here mentioned. Dr. Balfour says that baget is a monstrous state of the grain in which the expanded ovary, formed in a curved form. The same authority states that it is developed in the sphenopogon plant and ovule of the Cyperaceae; for although extremely distended by the entophyte, it hardly approached difficult of recognition, the integuments increase without completely losing their form, which they should have taken had they grown into the natural grains. In the wild, which has been called Sebastian, there is a species of the filamentosous portion, called Phacelia, by Lecille; or Fee, or Esposito, by Duchesne, are only, properly speaking, organs of vegetative propagation. The fungus which grows from this apparatus is an elegant Sphacia. Dr. Christian, in his work, gives the opinions held by some eminent men, of follow. De Candolle, Cuvier, and Mivart.
be a fungus, situated between the glumes where the way should be. This can hardly be the case as we can see the coverings of the seed, also the remains of the stigma are sometimes present. Places of the junction of the seed with the receptacle, Selle, Fontana, Read & Field, considered that ergot was produced by an insect. Selle's observations though very interesting by no means prove that the disease is produced in this manner. For he says that he saw many ergote in which neither insects nor any traces of them were present. The most natural & seemingly correct view is to call ergotized grain, a disease condition of the seed, produced by a fungus.

The Chemistry of Ergot.

Dr. Pena gave an analysis made by Wiggers of ergot in 1831, he obtained the following results.

Ergotin: 1.25
Phenol fixed oil: 35.0
<table>
<thead>
<tr>
<th>Substance</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>White crystalline fat</td>
<td>1.05</td>
</tr>
<tr>
<td>Cein</td>
<td>0.76</td>
</tr>
<tr>
<td>Sugar</td>
<td>46.19</td>
</tr>
<tr>
<td>Vegetable or觜ony</td>
<td>7.16</td>
</tr>
<tr>
<td>Reucked Sacherine Matter</td>
<td>1.55</td>
</tr>
<tr>
<td>Gummy ext. &amp; colouring Dc</td>
<td>2.33</td>
</tr>
<tr>
<td>Albumen</td>
<td>1.46</td>
</tr>
<tr>
<td>Super Phosphate of Potash</td>
<td>4.42</td>
</tr>
<tr>
<td>Preps. of lime with trace of iron</td>
<td>0.29</td>
</tr>
<tr>
<td>Silica</td>
<td>0.14</td>
</tr>
</tbody>
</table>

Eygot 102.20

Eygotin was procured by digesting eygot in ether which removed the fatty matter, then boiling in alcohol. This solution when evaporated was treated with water, left eygotin undissolved; it was of a reddish brown color with an acrid bitter taste. When warmed had a peculiar unpleasant odour. It was soluble in alcohol but not so in ether, or water. One grain of it was equal to one to a half ounce of eygot. This principle was said not to act on the uterin, but that the substance called vegetable
Osmajone was connected with its uterine influence. The oil obtained by means of ether is said by Dr. C. Hooker of Connecticut to produce the effects denominated ergotism. These assertions require further proof before they can be regarded as facts. They have shown that neither Dr. Christiansen nor Mr. Wright were able to obtain the substance which Dr. J. Phillips calls ergotin, though they followed his method. Dr. Sipap has given the last of most complete analyses.

The following substances were obtained from 100 parts of ergot:

- Yellow-fluid fixed Oil . . . . 34.50
- Maroch . . . . . . . . 2.75
- Albumin . . . . . . . . 1.00
- Inulin . . . . . . . . 2.25
- Gum . . . . . . . . 2.50
- Unkryssifiable Sugar . . . . 1.25
- Brown resin . . . . . . . . 2.75
- Fluxin . . . . . . . . 3.50
- Vegeto Animal Matter . . . . 13.50
- Osmajone . . . . . . . . 0.75
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safflower acid</td>
<td>0.50</td>
</tr>
<tr>
<td>Liggin</td>
<td>24.50</td>
</tr>
<tr>
<td>Colouring principles</td>
<td>0.50</td>
</tr>
<tr>
<td>An odour principle not isolated</td>
<td></td>
</tr>
<tr>
<td>Fungate of Potash</td>
<td>2.25</td>
</tr>
<tr>
<td>Chloride of Sodium</td>
<td>0.50</td>
</tr>
<tr>
<td>Sulf. of Lime + Magnesia</td>
<td>0.50</td>
</tr>
<tr>
<td>Sub-Phosphate of Lime</td>
<td>1.25</td>
</tr>
<tr>
<td>Oxide of Iron</td>
<td>0.25</td>
</tr>
<tr>
<td>Silica</td>
<td>0.15</td>
</tr>
<tr>
<td>Water</td>
<td>2.50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2.35</td>
</tr>
</tbody>
</table>

Mr. Wright thinks that many of the substances as obtained by his process have been produced the same may apply to this extremely complex analysis. The sugar for example, might be formed by decomposition during the time the solutions were kept before being brought under investigation. He has been able to discover any vegetable albumen in effect. The active part of this thing is in the fixed oil. There is quite considerable rosin obtained from gum turpentine.
gallot, but commonly has a reddish brown tint. It is prepared by forming an ethereal
fracture. It evaporates by a gentle heat. It has an acid taste peculiar to the digitale.
stable in alcohol. Oil obtained by expression has not the properties of digitale when given
to animals. The proper active principle has not yet been obtained; though Dr. Bensley
uses a preparation, which he has discovered and called digitale, this is said to be quite
free from the poisonous part of the drug. Digitale may be known by the following
traits. The infusion or decoction is of a
reddish purple colour with a slight acid
reaction. The acetate and acetate of
lead and tinctorium of gall, give precipitate
with the decoction. Nitrate of silver
gives a precipitate soluble in ammonia
insoluble in nitric acid, Chloride
depen its colour. Iodine does not give
a proof of the presence of starch. Chloride
do.25 g. of gold gives a yellowish deposit. Chloride
renders it slightly turbid.
The physiological effects of Ergot.

Ergot of me seems to act as a slow poison when taken in small quantities often neglected by most animals. Mr. Wright has injected strong solutions of ergot into the veins, arteries, and veins of dogs & he arrives at the following conclusions with regard to the action of the poison. When introduced at once into the current of the circulation, the nervous system generally seems to be affected. With the brain affected and may be acted on at the same time, as shown by coma & paralysis coming on together, or he says the paralysis may be immediate, coma following at a longer or shorter interval after. A strong solution acts instantly and with overpowering force. A weak preparation on the other hand brings the nervous energy for a time, which becomes gradually subdued under the poison. A very dilute solution does not produce any noticeable effect at first, but gradually lowers the vital powers till life ceases.
When introduced into the arteries the brain is
the organ first brought on + the spinal cord
front. When the same gentleman injected
solutions of salt into the tissues of animals
plastic matter was formed often in a
circumscribed cavity, bounded by a solid
inertia substance of a Chiefs consistence.
This could be easily broken down; in some
instances the gas had more diffused among
the muscles + tissues round the place of
injection forming numerous cavities in con-
nection with one cyst. I am sorry that
I have had another time new opportunity
to repeat these experiments since beginning
with this subject, though I think it not a
doubt but they may be taken as perfectly
correct. The last but namely the injection
into the tissues has been instructing as
they might perhaps be put to a practical use
in surgery. When reading the various modes
of treatment of cancer in Dr. Walton's book
in that subject among the rest the following
presented itself. Removal by the induction
of phacelus. Here it is said that when cancerous masses have been attacked by mortification they have been completely destroyed; two instances are recorded of the removal of cancer by inducing death through inoculation. The first was a case operated on by Dr. Royal surgeon of the Hotel Dieu at Gaillac. A remarkable success followed this experiment. He made a small incision in the centre of the mamma "so much enlarged by an irregular fixed sessile tumour that it measured 3 inches in circumference." He sewed the wound with lint soaked in gangrenous dries. On the third day the wound inflamed and it exhaled a putrid odour. Gangrene progressed so rapidly that in 18 days the entire mass separated. After a lapse of four to a half months, the wound had completely healed. Eighteen years afterwards the lady was alive and had the bad a return of the disease. She then operated was performed successfully by Delitay, who inoculated a cancerous tumour with heated gangrenous
The mass separated on the 13th day; the patient was a man aged fifty years. Dr. Dalke then says that each proceeding does not however secure limitation. From this remark some may infer the cases of carcinoma or other tumours hopeless to the ordinary modes of treatment, might not one similarity to that adopted by Mr. Pogal be resorted to as holding out the small means of success, as shown as the poisonous matter used in the above two cases might not always cause in its destructive effect at the former limit, but be absorbed to produce febrile or other antecedent symptoms of a fatal nature. The thought has occurred to me (whether foolishly or with any proper motive, I supplant, or the more sage judge, might or these doubts decide) that by instilling a strong solution of leach for the dangerous portion. It being to into the centre of the tumour, destruction of the foreign part might be accomplished without danger to the patient. That the activity of morbid growths should be overcome, before
Much injury was done to the healthy textures we may argue, from the low mortality of abnormal structures generally. The fæces and poisonous corrosive salts used every day for a like purpose (destroying growths by causing small portions externally to slough) yet in time taken as without the least effort. Might it not be asked whether this tedious and very painful mode (which often fails in the end to give entire relief) should not be superseded by the gentle introduction of a solution of caustic, by means of a syringe with tincture of cannela, this latter although it might be as painful would not be such a tedious process if it answered at all. Dr. Simpson who has used caustics with great success, observed (if I mistake not) in his winter course of lectures there as generally used acting from the surface downwards but that the best mode of applying them would be at the base of the tumour. To effect the whole mass. Now the substance here spoken of could be more easily applied
in this way than many others. Since thinking
over the above, none of the lower animals
have fallen under my notice, presenting a
growth or hormone to experiment on. So that
after a few trials, all that has here been
written may be taken theory, however if
humanity would be benefitted to the least
degree, I would hope otherwise.
When ergot is given for a long time to
animals, paralysis is produced. It is
by its much hardened, as seen by blindness
and loss of feeling. Death generally follows from
shaking of the nervous force. The greater
thought that actual disease is produced,
as seen in the flow of tears, pus discharged
from the intestine, thickening of the mucous
membrane lining the stomach, increased
size of the liver and abdominal glands. Traces
are deposited in the lungs. These be considered
as proof of a suppositious condition. The agency
of animals slowly poisoned with ergot is
found gradually to diminish until they often
fail to eat at all. The cavities of the heart are raw.
empty on post-operator examination. The pulse is much increased after a large dose of ergot and even is diminished in force and frequency. When ergot is applied to the skin when thin the action follows, but when applied to a wound for any length of time sloughing is produced, Mr. Wright says he has tried it upon wounds nearly healed in less than 24 hours they have discharged pus and the sloughs abundantly.

Therapeutical effect of Ergot.
Strong solutions of ergot have the power of arresting hemorrhage. Dr. Müller has performed experiments for the purpose of proving its hypertonic power, and succeeded in stopping the bleeding from large arteries and veins. Mr. Wright has used a weak solution to sponge inured parts with the effect of stopping oozing. He has found that the parts are less liable to a healthy union.

The value of ergot of rye as an obstetrical agent has long been known. The first account of its use in this way is given by Camerarius
in the Actes des Curieux de la Nature for 1668, when says that it was employed to hasten labour by midwives in Germany. The first reference of Despanser was published in 1777 in the Gazette de Saint-Diéhard. All believe its introduction into British practice is owing to Mr. Stearns & Chapman of New York. Long before the present time its value has increased and now it is considered by most, the most potent drug for promoting uterine contractions.

Many however have disbelieved in its power over the uterus Clemens, there may be mentioned L'Herescin, Madame La Chapelle, DeBird, Jackson, Hall & Mr. Capron; the last named gentleman stated that he regarded loget as a drug which it is requisite speedily to expel since from the list of the Phaenocremia, because he thought the stomach would be injured by the phlogistic acid contained in it. Some on the other hand have thought it a means too violent for employment. Among these are Dr. Watson, Dr. M. Moore & Mr. Peterson.
of Aberdeen who says, "Until some regulating power can be applied to its incessant action, though with me a great favourite in certain cases, I must always consider it as uncertain and dangerous." They among these, Borett, Chirnside, Gardin, Reischki, Leith, Dow, Blandell, Jewell, Smith, etc. argue that if properly administered it may always be gain with advantage. Mitchell says I consider it to have saved the lives of many children. Were it introduced into general practice the death of a woman in childbed would never be heard of." Davenport says I have never seen a case justifying the conclusion that the chief has followed the cautious employment of opium. Here as in many other things, a middle course ought to be taken as the safest of the two powerful effects: or on the other hand to give it recklessly in every case without considering whether it is required or not.
But the cases should be properly selected if not contraindicated by rules which have been laid down for its administration, it may be used with the best advantage. I have given it in twelve or fourteen cases not always I must confess, where it was actually required but for the sake of observing its effects. The dose varied from half a dram to two draams. Fidnness was produced in five or ten minutes in about a third of the cases. The pains not being much increased. In all but two when the light was retained the uterine action was remarkably increased about fifteen or twenty minutes after being taken. In these two the effect at all was obtained the pains continuing much the same for both force and frequency till the birth of the child. In some of these cases the infant fell soon. The following rules ought to be observed both as to the administration of opium. The dose taken should be gradually increased or kept tolerable. The presentation
should be ascertained, normal. No attempt should exist in the soft parts or others from work of the pelvis. When there is much availability on the part of the patient it has been thought advisable not to give it. It has been stated that if given shortly before the birth of the child, in case when post-partum hemorrhage may be expected that it is sure to arrest this disastrous occurrence, by causing the uterus to contract firmly after delivery.

In a case of Pienorrhagia (the patient getting extremely weak and piled from loss of blood) After two or three injections of a solution of Alum had failed, I gave one draught of the mixture of Ergot which had the good effect of checking the bleeding very speedily. Upon putting some questions to the patient the day following, she said to rate her own words that the wound felt much better. I saw stated in a Paris Journal of Medicine not long ago that the by-pass of Ergotin had been used both
Access to stop the profuse expectoration which follows some cases of pneumonia. Whether it has been partly hindered or not, remains for further trial to prove.

The action remains yet to be spoken of. Does expect of life possess the power of preventing abortion at last. The statements of many very eminent men are very contradictory on this subject. For instance Dr. W. Ramsay has published cases in which labour was brought on in 55 cases by its use alone, without interfering with the membranes. All the mothers but one recovered. 33 of the children were born alive, 122 still born. Dr. Paterson, Mr. Mann, Dr. Hoffman have likewise succeeded by this means. Dr. Churchill from London I have taken these statements because in the space & safety of this mode of inducing premature labour. On the other hand, Boscott (in the American Medical Record) mentions that it has occasionally aborted. Chataert & Belair state that it has no influence upon the uterus, unless the action
of that organ shall have already commenced. Dr Wright also says that he has been many instances in which its administration in the late period of pregnancy was not followed by any increased uterine action. This being the very varying opinions of the above authorities. I would withhold mine until having been sufficient trial made of it, when an opinion might be given with some confidence.

Dose & mode of administration.

The powder is most commonly given to women for labour. The draught should be infused in a teacupful of boiling water. A little sugar may be added to cover the acid taste. This should be taken at three separate draughts allowing an interval of ten minutes between each. Having the infusion well so that the powder may be swallowed. When digst has to be given for some time, five or ten grains three times daily is the dose, in any vehicle to suit the patient taste. The infusion of digst prepared by infusing 5g of digst in 3cl of boiling water, is given in the dose of half a third
of one draught, or one Aromatic Tincture.
A draught is obtained by boiling for ten minutes the same proportions. The tincture of
bogot is given in doses of from half a draught to one draught, during labour, in other
cases from ten to twenty minutes. The fact
bogot ether, is like the last but helpful.
Tonic ether is substituted for proof spirit.
Dose is the same. The Bogot of Dr. Bray
Dose are 1 to half to three grains every quarter
of an hour during labour. The same quantity
may be given three or four times a day in
other cases. A syrup of Bogot is used.
In concluding I ought but to offer a few words of apology for the long lapse of compilation seen. The fact being that until a few weeks since, I had not fixed upon a subject, having wasted much time by choosing one I then laying it aside for another, till at length I was forced to act both these duties. I know how that the subject undertaken would require many months to investigate with any degree of satisfaction, for there are many interesting experiments which I should like to satisfy my curiosity with regard to, when time & opportunity offer. Let me hope then that the reader will extend his indulgence to the infirmities & pardon the many faults he may find.

John Norman.

Most certainly as in duty bound, the reader will extend his indulgence to the faults, which are another few, one far between.