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PICRIC ACID

OR

A FEW COMMENTS ON A BIT OF "MASTER WORK."

BY

LOUIS B. COUCH, M.D.

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NYACK-ON-HUDSON, N. Y.

Prof. Sam'l A. Jones, in criticising my experiments with Picric Acid, has made so many false statements concerning me, that in answering him I hardly know where to commence or where to end. He begins his very ingenious article with the following quotation :

"The picrates ! the picrates !" shrieks the mad-man ; "we shall all be blown up ! The picrates will blow us all up !" *Surveiors of the Chancellor*, p. 61, (*Jules Verne*).

In more than one way does our Jersey physiological genius betray his close study and imitation of the scientific writings, and discoveries of Jules Verne. ("Twenty thousand leagues under the sea" "From the earth to the moon" etc. etc.) And especially is this noticeable of his latest production, his article upon the physiological action of Picric Acid, wherein he describes with Verne's style and verbiage, his wonderful discovery "fatty degeneration" of the red corpuscles of the blood. The discoveries of these exceedingly clever writers are both alike credible, those of Verne, however, being entitled to the more consideration from the fact that he wrote scientific nonsense without expecting people to believe him. He wrote and amused his readers; Jones wrote and abused his. Verne's writings were eminently successful in filling his coffers ; Jones' will be equally successful in filling coffins:

Your readers will doubtless remember that in the April number of the TIMES, I took occasion to prove the falsity, and utter absurdity of the theories and pretended discoveries of Prof. Jones, showing by experiments upon animals that the blood-corpuscles of picricised animals, which he claims are destroyed by "fatty degeneration," remain even after tremendous doses of the drug, in a perfectly healthy condition.

When my paper was read before the N. Y. Co. Med. Soc., a specimen of the blood of a dog taking 66 grs. of Picric Acid per day, was submitted to the Society for their judgement, and Prof. Allen, an eminent microscopist, on examining it, said, "That blood is all right, there is no "degeneration" about those corpuscles."

I frequently examined the blood of all the animals I experimented upon, and in no case, not even after death, was there the least change from the normal condition in the blood-corpuscles.

The author of that "fatty degeneration" vagary never has, and never can produce with Picric Acid, the condition of the blood-corpuscles so accurately described by him ; nor has he any authority whatever for his statements, as he himself well knows. He has deliberately made and published as truth, statements about his pretended discoveries concerning this drug, which never were made by him or anybody else; but are simply products of his vivid Verne-like imagination.

But some friend of this astute Jersey-man may say Prof. Jones has authority for his statements. Prof. Erb, of Heidelberg University, has experimented with Picric Acid, and found that it produced "fatty degeneration of the red blood-corpuscles," "demonstrates" an impairment of the "oxygen-bearing function of the hæmatine," decrease of the body heat, and final death from "asthenia." Dr. Jones quotes from Erb's experiments with *Picric Acid*, and shows wherein he (Erb) and you are at variance.

To such shortsighted, and credulous followers of Dr. Jones, I would say, that in the first place Erb never has experimented with, or wrote a pamphlet on, *Picric Acid, per se*. 2d, Never has said that it produced "fatty degeneration of the red blood-corpuscles," 3rd, Never has "demonstrated" that it impaired the "oxygen bearing function of the hæmatine" 4th, Never declared that death from it, was produced by "asthenia." But where does Prof. Jones get his authority for declaring that Picric Acid produces such conditions? Read his article in last month's TIMES and see. He has deliberately quoted from Erb's experiments with the Salts of Potash and Soda, drugs which destroy *chemically* the blood-disks, to prove that Picric Acid produces his "fatty degeneration of the red blood-corpuscles."

Is not that a beautiful specimen of scientific logic? Listen ye "students fresh from the plough tail" while your Professor, the highflown Apostle of "master work," rolls scientific nonsense off his tongue. Listen nor dare to question what you hear. Listen and think of what you may "discover," and what you may be, if you have less honor than boldness, less love of truth, than love of self.



Erb found that saturating the blood of animals with large doses of these salts, produced a peculiar "granular" condition of the red-blood-corpuscles, and final destruction of those bodies. He also added solutions of these salts to blood outside the body, and watched the effect under a microscope. Precisely the same phenomena took place, as when the drug was administered internally, showing that their action was *chemical* and not physiological. Erb recognized this fact, and was content. Not so with our Jersey-Scientist; such incomplete and unscientific conclusions will hardly do for him. So what does he do? He gives to one man (Tabor,)  $3\frac{1}{2}$  grs. of Picric Acid per day; to a second, (White,)  $1\frac{1}{2}$  grs. per day; and takes one grain per day himself; and with what results? Why both Tabor and White, poor fellows, became immediate victims to "fatty degeneration of the red blood-corpuscles," while Saml. A. Jones, the little Professor with the 1—ng\* jaw, being "out of health" when he made that proving, escaped the dire disaster which befel his comrades.

In Prof. Jones' review of my paper may be found the following :

"Dr. Louis B. Couch has given a fine example of the explosive nature of *Picric acid*, and I purpose to show that he is at the worse end of the gun."

Not so ! Not so ! O self styled apostle of scientific "Master Work." Picric Acid is in itself non-explosive ; it only becomes dangerous when brought in contact with *caustic alkalis*. You sir, with your peculiar genius for the same, have furnished the latter, and if explosive compounds, dire disaster and ruin result from your connection with it, I am not responsible—Upon your guilty head be all the blame your acts so richly deserve.

Picric Acid then, has no action whatever upon the blood-corpuscles, and the destruction of those bodies by the salts of potash and soda, is chemical and not physiological.

As evidence that Dr. Jones *knew* that this destruction of the blood-disks was chemical, let me refer the readers of the *Times* to his article, "On the Erythræmalysis produced by Picric Acid" p. 3, and again to his latest production, in both of which, he, having quoted from Erb's experiments with the Picrates of potash and soda, de-

\* This word is purposely left incomplete to allow those reading Dr. Jones' criticisms to supply such letters as seem to them most appropos=(lecturing, lampooning, libelling etc., etc., etc.)

clares that the blood-corpuscles may be destroyed "both in and out of the body."\*

Dr. Jones asserts that Erb declared that *Picric Acid* induces such destruction; but that statement is a deliberate falsehood, for he knows as well as I that Erb's experiments were made *entirely* with the salts of potash and soda, and *never with Picric Acid*. How a man with any regard whatever for truth could make and publish five deliberate falsehoods, as Dr. Jones has in his "post-script," is past my comprehension. He must be either ignorant, dishonest, or both, and I cheerfully allow him to take his choice between the indictments.

A few words in explanation of my statement that the appetite of the dog I sent Dr. Jones "was poor," and the amount of blood present in the carcass greatly deficient. The proving was made with the alcoholic tincture of Picric acid, which contains less than 5 p. c. of the drug. During the first two weeks, small doses were administered, which had the effect of *greatly* increasing the appetite. (It was during this period that "the dog ate all the meat I would give him.")

During the next two weeks, large doses were administered, which destroyed the appetite. Having kept no account of the amount of food or drink taken, I could only do as I did, guess at the amount of food. I therefore stated that I could not "give a definite answer" to that question.

In addition to this, vomiting and diarrhœa existed throughout the entire proving. I found at the post-mortem therefore, just what I expected to find, "a great deficiency of that vital fluid, the blood."

Dr. Jones after declaring that the watered blood I had sent him was also frozen says:

"That I would make a "diagnosis" or base a "theory" on *frozen blood*, is an assumption which I trust one of the founders of the *American Microscopical Society* need not stoop to deny. \* \* \* \* \*

"That in the blood sent I, of course, found the blood-corpuscles destroyed," is another instance of Dr. Couch's inventive capacity. What I did find in that blood was such a quantity of blood-crystals, as to raise the question: *Can such an excess of crystals be found in the unfrozen blood of a dog poisoned with Picric acid?"*

\* Transactions of The American Institute of Homœopathy, 1876.

“Rollett, who has produced a very valuable work on blood crystals, *makes use of a blood the cells of which have been destroyed by freezing and remelting.*” Frey on the microscope, p. 238.

The blood I sent Jones was *watered*; he says it was also *frozen*, yet declares my statement that he “of course found the blood-corpuscles destroyed” to be “another instance” of my “inventive capacity.”

Now, either Dr. Jones did not examine that blood at all, and was ignorant of the fact that freezing destroys the blood-corpuscles, while crystallizing *their coloring matter*; or he made that statement to deceive the profession, wishing them to believe that the blood-disks were *not* destroyed. But he must have examined the blood to have discovered “*such a quantity*” of crystals, and as he examined the blood, he must have found the corpuscles destroyed, for either *watering* or *freezing* the blood, would destroy them; and if the blood were not watered and frozen, Dr. Jones claims that Picric acid produces such destruction.

Here is an opportunity for “one of the founders of the American Microscopical Society,” to again display that profound Verne-like erudition, so lavishly bestowed upon his paper on the physiological action of Picric acid.

I now propose to prove that Samuel A. Jones, M.D., Prof. of Mat. Med. etc., etc., etc., etc., did make a diagnosis on that specimen of watered, frozen blood that I sent him. We see by his paper that that blood *did* contain “such a quantity of blood-crystals, as to raise the question: Can such an excess of crystals be found in the unfrozen blood of a dog poisoned with Pic. acid?” From this statement we are to understand, that the blood did contain an “excess of crystals;” 2nd, that he knew that freezing would produce such crystallization; 3rd, that up to June, 1878, he had no knowledge that Picric acid produces such crystallization. As evidence bearing upon this point, let me quote a portion of a letter I received from one of the Ann Arbor medical students, containing his notes of Dr. Jones lectures on Picric acid.

L. B. COUCH, M.D.

“Dear Sir.—In reply to your’s of the 28th ult., I have to say, that Dr. J. gave us a short lecture on Picric acid during the course of ’75 and ’76, but did not go fully into its physiological action.

On Friday Feb. 16th, 1877, he took it up again. Mr. T. came into the lecture-room with him. \* \* \* \* \* They had been together during the morning \* \* \* and the little Prof. of Mat. Med. etc., etc., etc., was visibly impressed. \* \* He talked rapidly contrary to his usual custom, so my notes are not as full as they otherwise would have been; however, they will show that he gave us a strong impression that Picric acid is a blood disorganizer; here are some of his words:

“The beginning of its action is on the blood; the *haematine is crystallized in the blood* (sic); the field of the microscope is *filled with crystals* like a pile of jack-straws.

(Gives example of blood-crystals, such as are formed by freezing. Vide Frey, on microscope; p. 238).

The spectrum was like that of hæma-globuline or hæmatine. (What else would it be?) *Picric acid alone gives us hæmatine in the urine* (?? ? L. B. C.)

\* \* \* \* \*

Yours, very truly,

\* \* \* \* \*

Prof. Erb in his experiments with the Picrates of Potash and Soda, mentions no such phenomena as described by Prof. Jones, and as Picric acid will not produce such crystallization, he, Jones, must have discovered those crystals in the “*watered and frozen*” blood that I had sent him. We have his own words, that he *did find an “excess of crystals” in that very blood*, and now, (1878) acknowledges that that blood was crystallized by freezing, and tacitly admits that he has no knowledge that Picric acid possesses such properties; and as he has no knowledge that this acid forms blood-crystals, he cannot have discovered such crystallization in any other blood than what I sent him. It must be plain to all then, that Prof. Samuel A. Jones, M.D., “One of the founders of the American Microscopical Society” “Prof. of Materia Medica and Therapeutics, Experimental Pathogenesis and Dean of the Faculty” \*of the “Great University of Michigan,” did

\* The number of titles which the learned Professor appends to his name, reminds me of the personal notices in the N. Y. Sun, of his illustrious namesake, George Jones, of N. Y., who subscribes himself as “George the Count Joannes, the “*Unerushed*” Imperial Count Palatine, Delineator of Shakespeare, Friend of the Duke of Wellington, Counsellor to the Supreme Court” etc., etc., etc., etc. Verily the modesty of these Joneses when writing of themselves, is past all comprehension.

"make a diagnosis on that specimen of watered and frozen blood that I had sent him.

In my paper in the April number of the *Times* I said:

"On examining the (watered and frozen) blood I had sent, the Doctor, of course, found the blood corpuscles destroyed. He prepared a paper on the blood-destructive properties of *Picric acid*, which I believe he read before this Society (N. Y. County Hom. Med.) in 1875."

Dr. Jones wishes people to believe that I was wrong in making that statement, so he says.

"My paper, 'read before this Society,' said not a word about 'blood-destructive properties,' it was read October 28, 1874, two months before Dr. Couch had sent the blood."

Now Dr. Jones "did prepare a paper on the blood destructive properties of *Picric acid*," which he read before a N. Y. County Med. Soc. in the Spring of 1875, as I asserted. Before reading that paper, he went to Prof. T. F. Allen, to borrow his 1-50 objective to show to this Society the specimen of the "watered and frozen" blood I had previously sent him, (which, of course, illustrated "the hæmolytic action of P. A.") and on Dr. Allen's refusal to lend out his property, severely abused that gentleman in that peculiar way so characteristic of him.

Remembering this fact we can appreciate Dr. J's statement that :

"On February 24th, 1875, (after receiving the frozen blood) I read a paper *On the Hæmolytic Action of Picric Acid* before the New York Hahnemann Academy, giving therein a *résumé* of Erb's results."

In the foot note on p. 68, the learned Prof. has alluded in the following way to my "study of crab-lice."

"When he rises from the study of 'crab-lice' to an investigation of blood-genesis, (and some 'evolution' freak may make him capable of this), he may comprehend why Allen should think of *Picric acid* in Addison's disease; why Hughes should look to it for help in chlorosis, why I should advise it in Progressive Pernicious Anæmia, and in Intermittent Hæmatinuria. Young doctors are like 'pollywogs,' their heads are biggest when they have the least body."

In a late number of the "TIMES," I advised the local use of alcohol, instead of the mercurial ointments in cases of crab-lice. I had previously learned that it kills these little pests, and dissolves certain parts of their heads and legs.

In my "studies" I have learned that there are

two kinds of "crabs;" human and insectivorous; both properly come under the head of "back-biters."

The latter variety however, are not underhanded and sneaky in making their attacks; they subsist upon the blood, do not prey upon the good name and reputation of those with whom they come in contact. Lastly alcohol dissolves certain portions of the ordinary crabs, but alcohol or fusel oil in the most heroic doses \* \* \* \*

My erudite friend doubts, and sneers at, the crab killing properties of alcohol; at this however I am not surprised, 'tis but another evidence of the truth of that old proverb, "Familiarity breeds contempt."

As we have previously showed, the homœopathicity of *Picric acid* to "Addison's disease," (it dyes the skin brownish yellow) "Progressive Pernicious Anæmia," and "Intermittent Hæmatinuria," we will waste no space on those points. Dr. Jones asserts that "the heads of *pollywogs* are biggest when they have the least body." We were not aware of that before, we are very much obliged to the learned Professor for the original information he imparts. We congratulate him on his "discovery" of this new fact in natural history.

As the Dr. has referred to amphibious animals in his blood-destructive article, he will allow me to allude in this connection to *Æsop's* fable of an old "pollywog," and apply his moral. That learned Savant tells of a frog whose young were trodden under hoofs of a passing ox. "And Oh mother," said one of them afterward, "It was a big four-footed beast." Big, quoth the old frog,—and she puffed herself out to a great degree—as big as that? oh a great deal bigger than that, said the little one; if you were to burst yourself you never could reach half its size. Provoked at such a disparagement of her powers, the old frog made one more trial and burst herself indeed."

Prof. Erb is a great man. The little Professor of Mat. Med. etc., etc., conscious of his smallness, has endeavored to appear as great as Erb by "blowing himself up" with the "Pirates." The expansion was altogether too sudden, and the result as we have seen has proved disastrous.

*Æsop's* moral is, that "men are ruined by attempting a greatness to which they have no claim."

In my April paper I asserted that 15 gr. doses "increased" the body heat and "diminished the excretion of urea." Dr. Jones is of the opinion that this is "utterly impossible" and he refers his readers to "Wagner's General Pathology, p. 638, et. seq." to prove this utter impossibility. The Dr. says:

"Perhaps the severest comment upon the education of the average "homœopathic" physician—I mean the article *sui generis*—is found in the fact that *so few members* of the N. Y. Co. Hom. Med. Society, questioned this astounding assertion, when Dr. Couch read his paper."

The real truth is that *no member* "questioned" that "assertion," because they *knew nothing about the facts*—which is also the very reason why Dr. Jones *does* "question" it. As the learned "Discoverer" has wisely omitted what Wagner does say, he will pardon me if I quote it for him, p. 639. "In some cases an *impaired state of nutrition* before the fever will suffice to keep the *excretion of urea down to a minimum even during high fever*. \* \* \* furthermore there is observed especially at the beginning of the fever, *remarkably small excretion of urea* in proportion to the height of the temperature, while on the following days with the same temperature, the urea may reach a remarkable amount. p. 640 \* \* \* Lastly the amount of urea in the period of *cessation of fever*, is often *greater* than in the time of greatest fever."

I leave the readers of Dr. J's paper, to decide whether in making these statements, and referring them to "Wagner's General Pathology," he was ignorant of what Wagner says, or simply intended to mislead and deceive them.

Having effectually settled this "fatty degeneration" nonsense, let us give the coloring matter of the urine our next attention. Before entering into this subject, let us understand fully the difference between the "*urohæmatine of Harley*" and "*hæmatine*" and the *relative importance* of these pigments when present in the urine.

Harley\* regards his "*urohæmatine*" as an "organic substance," the normal coloring matter of the urine, which may be abnormally increased; it is supposed by him to be "an index to the tear and wear of the tissues," and especially as a measure of the destruction of the red blood-corpuscles. This theory though very reasonable, is not by any means established.

He regards it also as coming "directly from the food, a vegetable diet furnishing the greatest quantity, animal food yielding scarcely any." Hæmatine on the contrary is an abnormal coloring matter of the urine, and is always accompanied by albumen. (Tyson).

This is the condition known as "*hæmatinuria*,"—that is, the direct passage of the blood coloring matters alone into the urine;—it occurs in the course of various diseases, as scurvy, scarlatina, purpura, etc., etc., and is one of the conditions our would be scientific friend imagines is caused by Picric acid. Let me quote his own words in proof of this. "Both drugs (*Argentum nit and Pic. acid*) effect the kidneys (?); both produce albuminous urine; (?) both deprive the red blood-corpuscle of its hæmaglobine; (?) but Picric acid *alone* gives us *hæmatine* in the urine"\* (?)

Now we will quote from his article on the physiological action of Picric acid wherein he declares that this coloring matter, the product of blood-corpuscular destruction, is not "*hæmatine*" but simply "*urohæmatine*."

"The oldest living element of the blood, the red blood corpuscle, succumbs to the deleterious influence of Picric acid, fatty degeneration of its contents ensues, its coloring matter (hæmatine) is no longer capable of bearing oxygen to the tissues, and is therefore eliminated by the kidneys—as urohæmatine."

Throughout my experiments upon animals, I frequently tested for an "increase" of the urohæmatine of Harley, *and in no case, not even after tremendous doses of Picric acid, was it present in more than normal quantity. Tests for albumen also gave invariably negative results; the spectroscope proved the absence of "hæmatine."*

In view of these facts let us cast a glance over Dr. Jones heroic experiments with this drug, to see if his proverbs found "albumen" "hæmatine" or even an "increase of urohæmatine" in the urine.

Tabor's name comes first on the list. He took nearly three times as large a daily dose as White; his blood was sufficiently "saturated with the acid" to "establish renal elimination," he had as a product of blood destruction (?) a daily increase over the normal quantity of 3.5 grs. of urea. Did Prof. Jones discover any blood-

\* Harley on the urine and its derangements.

\* On the Erythræmalysis produced by Picric acid p. 5.

corpuscles partially destroyed, "granulated," coloring matters "crystallized"—or other interesting phenomena described by him as caused by Picric acid?

Oh no, he guessed that "fatty degeneration" took place. Erb had produced a chemical destruction of the blood-corpuscles by the salts of Potash and Soda, and of course Picric acid would produce "fatty degeneration" of those bodies. What use of depleting poor Tabor *any further* in the cause of science? Did they examine the urine of this poor victim for an "increase of urohæmatine"? Yes! Did they find such increase? We are led to suppose so, for Prof. Jones in his most positive manner, says that "Tabor evaporated and incinerated the urine, and the incinerate gave him both the ferrous and ferric reactions."

Now that is a tremendous argument in favor of this blood destructive theory; it almost takes my breath away. I quite recover though when I remember that the urine of any healthy infant who never has had a smell of Picric acid, will give the same reactions. Let any one try it and see. "Evaporate and incinerate" some nursing baby's urine on a spatula or in a small butter plate; treat the ashes with dilute muriatic acid, then add a few drops of a solution of sulpho-cyanide or ferro-cyanide of potash. A beautiful red or Prussian blue color results, showing the "ferrous and ferric reactions;" which clearly prove the truth of the blood-destructive theory of this scientific "Prof. of Materia Medica, Therapeutics, Experimental Pathogenesis, and Dean of the Faculty" of the "great University of Mich."!!

Now let us return to the question. Did Tabor get an "increase of urohæmatine" after saturating his blood with Picric acid to the extent of producing "fatty degeneration of the red blood-corpuscles"? No he did not! Let me quote Dr. Jones' own words in proof of this.

"As I have not been able to get such testimony from any other prover, I hold his (White's) evidence subjudice." Allen's Ency. vol. VII p. 527. Tabor then, who took larger daily doses than White and Jones put together, did not have that promised "increase of urohæmatine;" so according to the theory of my learned opponent, he could not have been a victim to "fatty degeneration of the red blood-corpuscles," and that 3.5 grs. urea *could not* have been a "product of

blood destruction; nor that tremendous daily increase of uric acid (0.6 gr.) be an evidence of Picric acid "sub-oxidation;" neither could that daily increase of phosphates, of which White had 27.7 grs., be a product of blood-corpuscular disintegration. Thus much for Mr. Tabor, who took it will be remembered, as much Picric acid as Messrs. White and Jones put together.

Now for Dr. Jones, who took within  $\frac{1}{2}$  gr. as large a daily dose as White, did he get "fatty degeneration of the red blood-corpuscles"?

No, nor does he pretend to; he had a daily increase of 31 grs. of urea, too great a quantity to explain away as a "product" of blood destruction; but it must be explained; here his Verne-like imagination did not desert him. He boldly "took the bull by the horns" and declared that he was not in health when he made that proving, so he took Picric acid as a remedy; *his* urea increase was *not* a product of blood destruction, but on the contrary a "good evidence of increased oxidation."

Just how Dr. Jones being "out of health" when he made that proving, should save him from becoming a victim to his own fell disease, I leave for abler heads than mine to discover. As for myself I freely confess that I "can't see it;" such logic is too deep for me.

Now let us examine White's results. Did he get "fatty degeneration of the red blood-corpuscles?" Prof. Jones wishes us to believe that he did. He explains White's results in a very ingenious way. White's proving extended over a period of eighteen days: his blood was saturated with the tremendous amount of  $1\frac{1}{2}$  grs. of Picric acid per day.

We are asked to believe that this man had from the insignificant daily dose of  $1\frac{1}{2}$  grs. of Picric acid "fatty degeneration of the red blood-corpuscles;" that his increase of uric acid and decrease of sulphates and chlorides is an evidence of "blood destruction and consequent "sub-oxidation." We are asked to believe that this daily increase of 3.5 grs. urea throughout the whole proving (18 days) was an "evidence" of "sub-oxidation" and a product of blood destruction, and that that 27.7 grs. of phosphates, comes from the destroyed blood-corpuscles.

Was there ever a worse piece of scientific nonsense and humbuggerly inflicted on the profession than this?

Our Western friend is very like the man whom

Sheridan once described, as being "indebted to his memory for his wit, and to his imagination for his facts," differing from that individual, however, in that *he* is "indebted" to his imagination for both his "wit" and his "facts."

This wonderful genius evidently does not intend to give his ~~imagination~~ imagination any rest at all, for we see by a late journal that he now proposes to "supply" mental symptoms for Collinsonia can, on the supposition that it augments the excretion of the phosphates. What a fine Materia Medica we should have if we were all Joneses, and all so "scientific."

The further we go into this examination, the more apparent will this become.

The real coloring matter of Picric acid urine will next claim our attention. In my experiments upon animals it varied according to the size of the doses, from blood-red to almost black.

Dr. Jones wishes us to believe that he did not mistake this coloring matter for "urohæmatine," because "urohæmatine (he says) gives to that liquid not a bright red tint." \* \* \*

The "beautiful tint would have put any one but a 'prentice hand on his guard;" therefore it must be "utterly impossible" for him to have made that mistake.

"Harley on the Urine and its derangements," p. 105, reads as follows: "When urohæmatine exists in a free state (such as would be caused by wholesale destruction of the blood-disks) the urine is red before any acid is added. \* \*

\* \* \* Another fact which is of great clinical importance is that urohæmatine

\* \* \* may be *yellow, red or brown.*" He also declares (p. 108) that it may be "*deep brown, greenish brown, yellowish green, and finally black.*" In view of this fact, then, it must have been "utterly impossible" for Dr. J. to have mistaken this Picric acid pigment for "urohæmatine," as the high color would have "put him on his guard." He adds, as a "clincher," that "*the very test which I had to use in seeking urohæmatine would have exposed the mistake which Dr. Couch falsely charges me with making—IN THAT I SHOULD FAIL TO GET THE UROHÆMATINE COLOR.*"

We have his own words that he *did* fail in every case except White's, whose "evidence" he "holds subjudice."

If his statement be true, why was not the "*mistake exposed,*" especially in the case of Tabor, whose blood was "saturated" with the acid, and whose urine must, from the size of his doses, have been of a bright red color? Again, Dr. Jones says, in his first paper, "If this theory be true, we should further find an increase of urohæmatine,"—but nowhere in his paper does he mention his failure to get such increase, and not till months after, does he let the secret out. Why was this information suppressed? For the reason that if it were mentioned, the falsity of his blood-destructive theory would be apparent to all.

I wish in this connection to introduce some analyses of the urine of persons taking doses similar to those of Tabor, White and Jones, in their provings.

J. AMOS.	Urine, Cc.	Urea, grs.	Phosphates, grs.	Sulphates, grs.	Chlorides, grs.
Health.....	666	338.3	17.40	55.80	93.
Average in Medication..	1125	466.2	31.42	63.38	116.1
Result.....	+459	+128.2	+14.02	+7.58	+23.1
MR. CONGER.					
Health.....	733	332.	57.3	38.0	155.
Average in Medication..	1172	531.7	71.73	44.64	184.
Result.....	+439	+199.7	+14.43	+6.64	+29.
A. SAWYER.					
Health.....	833	231.5	26.4	39.7	90.1
Average in Medication..	1020	535.9	29.1	64.14	100.9
Result.....	+187	+304.4	+2.7	+24.44	+10.8

No "albumen," or "hæmatine," or "increase of urohæmatine" was present in any specimen of urine examined. The "urohæmatine of Jones,"

however, was present in all cases, and would disappear on the addition of a few drops of acetic, nitric, or other acid.

Dr. Jones finishes his truthful (?) paper by the following :

"NOTE.—On May 17th I discovered that the peculiar coloring of the urine which occurs when *Picric acid* is taken, is not due to *Chrysophanic acid*, as Prof. Tyson has certified, but that it is owing to the formation of *Isopurpurate of sodium*,  $\text{Na. C}_8, \text{H}_4, \text{N}_5, \text{O}_6$ , and of *Potassium*,  $\text{KC}_8, \text{H}_4, \text{N}_5, \text{O}_6$ . It is so unusual for a "regular" to be caught napping in "science" by *only* a "homœopath," that the event is worth recording. As my friend Dr. Couch called my attention to this matter (and also got Prof. Tyson to put himself on record), I trust he will share the pleasure which this little episode gives me."

The following letter from a prominent Ann Arbor physician will explain Dr. Jones' last "discovery :

L. B. COUCH, M. D.

MY DEAR SIR: Yours received, and in reply I would say that on June 12th, Prof. Jones *stated in his public lecture* that Dr. Couch was right, and he (Jones) was wrong; but that the coloring matter of the urine was not exactly what he (you) said it was. His authority for that state-

ment was Prof. A. P. Prescott,\* of the Chemical Laboratory, who made the analysis for him (J.).

\* \* \* \* \*

Very truly yours,  
\* \* \* \*

As Josh Billings says, "Comments is unnecessary."

I trust that the readers of the TIMES will not regard me a "young doctor" and "'prentice-worker," as jealous of the learned Professor, because of these wonderful discoveries—far from it. I am quite willing to acknowledge that he has distinguished himself thereby; he has covered himself, yea, verily, he has besmeared himself and all Ann Arbor with glory!

(Attention is called to the remarks of Prof. T. F. Allen, in another part of this journal, on Erb's Experiments. Prof. Allen is the person who "loaned" Dr. Jones, "Erb's Monograph on Picric Acid.")

\* I stated in the April No. of the TIMES that this coloring matter of Picric acid urine, was not "hæmatine" nor "urohæmatine," but "a vegetable coloring matter, a product of the decomposition in 'Nature's laboratory' of a portion of the Picric acid administered." I placed an interrogation point after the words "Chrysophanic acid," to signify that I did not believe it to be identical with that acid. It proves to be Isopurpuric acid in combination with bases. Isopurpuric acid is formed by the action of Cyanogen on Picric acid in the system (sic). Prof Prescott, however, was not the first to make known this fact. Prof. J. T. O'Conner, of the N. Y. Hom. Med. Col. made this discovery in November, 1877, and Prof. Allen and other friends of Prof. Jones were informed of it at that time.