IN RE GEORGE G. HENRY. APPEAL FROM REFUSAL TO GRANT PATENT.

ANSWER TO REASONS OF APPEAL—EX-PARTE AND CONTESTED CASES.—Under the eleventh section of the act of 1839, the Commissioner is bound to furnish to the court upon appeal his answer to the reasons of appeal in *ex-parte* as well as in contested cases.

SPECIFICATION—DRAWINGS.—The patent law requires every specification of a claim for machinery to be accompanied by drawings signed by the inventor and attested by two witnesses.

PROCESS—NOVELTY OF DEVICES IMMATERIAL.—Upon a claim for a process, it is unnecessary to inquire as to the novelty or utility of the arrangement of machinery described in the specification; for however novel or useful the arrangement or combination may be, if it be not the ground of claim, and relied on as such, no patent will be issued for it upon such a claim.

PRINCIPLE—PRACTICAL APPLICATION THEREOF—SUBSEQUENT INVENTIONS OF MACHINERY.—A well known principle or truth of natural science, as well as a newly discovered one, is patentable to the one who first applies it to the useful arts; but having been once made known and applied, any subsequent application of it, even though more perfect, must, to insure a patent, rest upon the new machinery or combination of machinery, and not upon the principle the novelty of which has been exhausted.

MANUFACTURE OF COTTON—GINNING, CARDING, AND SPINNING CONTINUOUSLY.—A claim for a new principle or process of manufacturing cotton, by carding and spinning the cotton in its fleecy state as it comes from the gin in a continuous operation, and before the fibres are disturbed by baling, and the other treatment before used in the process of manufacture to restore it to its original state: *Held*, To be anticipated as a process by Bryant's improvement on the Columbian spinner.

(Before MERRICK, J., District of Columbia, November, 1856.)

MERRICK, J.

The interpretation which I have put upon the eleventh section of the act of Congress of March 3d, 1839, makes it necessary to refer to the Office letter of the Acting Commissioner addressed to me on the 7th of October, 1856, in which he states "that it is not the practice of the Office for the Commissioner to give answer to the reasons of appeal in cases of a single application. Only in appeals from the Commissioner's decision, in cases of two or more interfering applications, a written statement or answer is submitted where the nature of the case seems to require it." It would

appear that in cases of appeal in single applications rather than in cases of interfering claims it is expedient that the judge who tries the appeal should be furnished with a response from the Commissioner to the reasons of appeal filed by the applicant, and for the obvious reason that in cases of conflicting claims the respective parties in agitating their several rights must incidentally guard the rights of the public; whereas, in an appeal from the rejection of a single application, there is no one to represent the United States before the appellate judge, unless we construe the law to mean that the Commissioner shall, on behalf of the United States, lend his aid to the judge in appeal, in reaching a correct conclusion in the premises, by filing a response to the appellant's exceptions. I find this to have been the construction placed on the law by other judges, and also to have been the construction placed on the act by the Patent Office, as appears by the fifth and sixth rules of practice in appeals contained in the letter of Acting Commissioner Weightman to Hon. James S. Morsell of the date of September 7th, 1852. The question is not of much practical importance upon the present appeal, but I feel it my duty to advert to it thus particularly to exclude the inference of acquiescence on my part in the announcement by the Office in this case of its present construction of that part of the eleventh section of the act of 1839 which directs the mode in which cases shall be prepared and submitted for revision.

The present appeal was set for hearing on the 15th of October, and the party was fully heard by his counsel, Hon. Reverdy Johnson, within a day or two thereafter. The case has since been carefully considered. A principal difficulty has been to determine from the specifications, the reasons of appeal, or the arguments filed by the party with the Commissioner what it is that the party really claims as the subject-matter of his invention. In his original specification, filed August 26th, he calls it "a new and improved mode of manufacturing yarns," and describes the nature of his invention and improvement as consisting "in an improved process of manufacturing cotton yarns by placing in the gin-house, in contact with the gin, the second machine of the series, called the spreader, followed by such others as are now used in mills employing the most approved machinery for the manufacture of cotton yarns;" and states that he con-

structs an endless apron in front of his gin, from which he feeds in about one-third the quantity in a given time now or heretofore fed in the old process; and in the rear of the gin he attaches a spreader and lap machine without an apron, through which the cotton leaving the gin, freed from its seed, in a soft and fleecy state, passes to the lap, thence to the carders, thence to the drawing, thence to the rovings, thence to the bobbin, thence to the spinning-frames, &c. After enumerating in vague detail many supposed advantages of his invention, he sums up the claim thus: "What I claim as my invention, and desire to secure by letters patent, is the improvement in the manufacture of cotton yarns effected by my combination and arrangement of machinery in the manner described, dispensing with much now in use, securing the cotton fibre from great injury and waste, and the general advantages before presented and derived from taking the cotton directly from the seed by the gin and carrying it at once to the spreader, in the manner substantially as and for the purposes described."

On the 4th of September he filed an amended specification, stating that the object of his discovery is "to manufacture the cotton lint as it leaves the gin without further handling, but by automatic mechanism, into any and every number of cotton yarn, so that I shall make more yarn, and of fibres nearly in their natural condition and strength, from any given quantity of cotton in the seed, than is now obtained. This object can alone be effected by making the gin the first of the manufacturers' series of machines, instead of isolating it to the planter's use, which is simply to separate by it the lint from the seed." And this amended specification he sums up, after disclaiming the Columbian spinner and its improvements, in these words: "But what I do claim as new, and desire to secure by letters-patent, is my automatic process, especially involving cotton in the fleecy lint or lap, so that my yarns shall consist of fibres of cotton in their normal condition, and uninjured by, because not subjected to, the usual machines now operated; and this I claim, substantially as described and for the purpose set forth."

Were the inquiry confined to the first specification, (and that was alone relied upon in the argument of the applicant's counsel,) it might with some force, but by no means conclusively, be

argued that the subject-matter of his claim was for a new combination of machinery; for that specification is itself framed with a double aspect: and in its titeling, as well as other portions, seems to contemplate a process, and not a combination of machinery, as the subject of discovery. But the second or amended specification, which must be taken to include the true demand of the party, abandons all claim to machinery as the matter of the invention, and relies finally upon what he calls his "automatic process, involving cotton in the fleecy lint or lap, so that my yarns shall consist of fibres of cotton in their normal condition, and uninjured by, because not subjected to, the usual machines now operated."

If the applicant designed to claim a combination of machinery, he has been singularly infelicitous in the language of his specifications. Neither, as the Commissioner in his opinion very justly remarks, has he prepared his case aright, if such were his object. The patent law requires every specification of a claim for machinery to be accompanied by drawings signed by the inventor and attested by two witnesses. It is by some held that the attestation to the specification is sufficient where the specification identifies and embodies by express reference accompanying drawings. (See Curtis on Patents, sec. 165.) However that may be, there are no drawings in the present case attested in either mode. The loose drawings which have been sent up with the other papers in the case are not such as deserve any consideration on this appeal. But more than this, in the reasons of appeal filed and to the errors assigned therein, must the revision of the decision of the Commissioner be confined. The applicant, on page 4, states explicitly that "he does not ask the patent on the machinery; he asks it on his process of manufacturing the yarns." And again, on page 7, he says: "I insist that I state, by annexing the spinning machinery to the gin in the gin-house, and letting the ginning and the spinning manufacture go on continuously in one process, I achieve extraordinary results." It is manifest, therefore, from the whole scope of the case that in the mind of the applicant his invention is a new and useful improvement of the art of manufacturing cotton yarns, and that the important part of his invention is the application of a supposed new principle, and that the machinery or apparatus by which the principle is

applied is not of the essence of the invention, but only incidental to it. He therefore defines it to be a process, and not a machine or combination of machinery. A claim to a new process, then, being all that is now made, we must dismiss from the inquiry all consideration either of the novelty or utility of the arrangement of machinery described in the specification; for however novel or useful the arrangement or combination of machinery may be, if it be not the ground of claim of patent, and relied upon as such, no patent will be issued for it, but the party must present that demand in its proper form and as distinct matter of patentable invention, in which event it will be passed upon by the proper authorities.

What, then, is the principle claimed? In one aspect of the case, the applicant seems to insist that he has discovered an automatic function or power of the gin and spreader when in juxtaposition to dispense, through the agency of the draft created by the rotary movement of the gin, with the intermediate process of gathering the ginned cotton and feeding from the one to the other; but the discovery of the propulsive force, and its adaptation to a spreader in juxtaposition with the gin, are not relied upon, nor do they seem to have been considered by the Commissioner, nor are they urged directly in the assignment of errors to his judgment. This needs, therefore, no further comment. The only intelligible demand which can be extracted from the case is that which the Commissioner has considered to be the real subject-matter of the applicant's claim, to wit, the principle that cotton taken directly from the gin in the fleecy state, and immediately carded and spun while the fibre is yet undisturbed by the processes of baling and the other stages of manufacture now used to restore it after baling to the condition necessary for carding and spinning, makes a better and stronger yarn than when subjected to those operations; and that he has embodied that principle in an application of existing machinery to attain this result. There is certainly no novelty in this principle as an abstract principle or truth of natural science, nor is there any novelty in the application of the principle thus broadly stated to the manufacture of cotton yarns. A well-known principle or truth of natural science, as well as a newly-discovered one, is patentable to the first applicant of it in the useful arts, as in the case of Watts'

contrivance for lessening the consumption of fuel and steam in fire-engines, and as in the case of Minters' self-adjusting leverage to the back and seat of a chair; but having once been made known and applied, any subsequent application must, to insure a patent, rest upon the new machinery or combination of machinery, and not upon the principle the novelty of which has been exhausted. But in the present case it has not been, nor can be, successfully maintained that the abstract principle is new, neither is the primary application of it with this claimant, but is due to the invention of the Columbian spinner, Bryant's patented improvement,* and other instances of its application cited in the opinion of the Commissioner. And although it may be conceded that the application in those instances was not so perfectly made as it might have been, or as it would be made by using the forms of machinery suggested in this claimant's specifications, yet that does not give him any right to demand a patent for the principle. There is no novelty in his invention. And although in the reasons of appeal the claimant insists that the immediate spinning from the gin, and with the power used to gin, is new, and that Bryant's improvement on the Columbian spinner did not produce similar results, he fails to show any distinction in the cases other than his mere suggestion of an undefined difference. This, standing by itself, cannot be sufficient to overthrow the objections of the Commissioner. There being no other power in the case as presented to me which can supply the fundamental defects of the claim which I have already noticed, it is unnecessary to extract and classify the supposed objections which the claimant may have included in his reasons of appeal; nor is it necessary to advert to that portion of the opinion of the Commissioner in which he argues the economical question, which in another aspect it might be incumbent upon me to analyze. I cannot escape the conclusion that the judgment of the Commissioner in the premises was correct, and his decision refusing a patent will be affirmed.

Reverdy Johnson, for the appellant.

*Patent to William Bryant, September 13th, 1823.