The Project Gutenberg eBook of The Colored Inventor: A Record of Fifty Years

This ebook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this ebook or online at <u>www.gutenberg.org</u>. If you are not located in the United States, you'll have to check the laws of the country where you are located before using this eBook.

Title: The Colored Inventor: A Record of Fifty Years

Author: Henry E. Baker

Release date: May 3, 2007 [eBook #21281] Most recently updated: January 2, 2021

Language: English

Credits: Produced by Stacy Brown, Suzanne Shell and the Online Distributed Proofreading Team at https://www.pgdp.net

### \*\*\* START OF THE PROJECT GUTENBERG EBOOK THE COLORED INVENTOR: A RECORD OF FIFTY YEARS \*\*\*

### **The Colored Inventor**

[Pg 1]

### A RECORD OF FIFTY YEARS

#### By HENRY E. BAKER. Assistant Examiner United States Patent Office

**THE** year 1913 marks the close of the first fifty years since Abraham Lincoln issued that famous edict known as the emancipation proclamation, by which physical freedom was vouchsafed to the slaves and the descendants of slaves in this country. And it would seem entirely fit and proper that those who were either directly or indirectly benefited by that proclamation should pause long enough at this period in their national life to review the past, recount the progress made, and see, if possible, what of the future is disclosed in the past.

That the colored people in the United States have made substantial progress in the general spread of intelligence among them, and in elevating the tone of their moral life; in the acquisition of property; in the development and support of business enterprises, and in the professional activities, is a matter of quite common assent by those who have been at all observant on the subject. This fact is amply shown to be true by the many universities, colleges and schools organized, supported and manned by the race, by their attractive homes and cultured home life, found now in all parts of our country; by the increasing numbers of those of the race who are successfully engaging in professional life, and by the gradual advance the race is making toward business efficiency in many varied lines of business activity.

It is not so apparent, however, to the general public that along the line of inventions also the colored race has made surprising and substantial progress; and that it has followed, even if "afar off," the footsteps of the more favored race. And it is highly important, therefore, that we should make note of what the race has achieved along this line to the end that proper credit may be accorded it as having made some contribution to our national progress.

Standing foremost in the list of things that have actually done most to promote our national progress in all material ways is the item of inventions. Without inventions we should have had no agricultural implements with which to till the fertile fields of our vast continent; no mining machinery for recovering the rich treasure that for centuries lay hidden beneath our surface; no steamcar or steamboat for transporting the products of field and mine; no machinery for converting those products into other forms of commercial needs; no telegraph or telephone for the speedy transmission of messages, no means for discovering and controlling the various utilitarian applications of electricity; no one of those delicate instruments which enable the skilful surgeon of to-day to transform and renew the human body, and often to make life itself stand erect, as it were, in the very presence of death. Without inventions we could have none of those numerous instruments which to-day in the hands of the scientist enable him accurately to forecast the weather, to anticipate and provide against storms on land and at sea, to detect seismic disturbances and warn against the dangers incident to their repetition; and no wireless telegraphy with its manifold blessings to humanity.



HENRY E. BAKER

All these great achievements have come to us from the hand of the inventor. He it is who has [Pg 3] enabled us to inhabit the air above us, to tunnel the earth beneath, explore the mysteries of the sea, and in a thousand ways, unknown to our forefathers, multiply human comforts and minimize human misery. Indeed, it is difficult to recall a single feature of our national progress along material lines that has not been vitalized by the touch of the inventor's genius.

Into this vast yet specific field of scientific industry the colored man has, contrary to the belief of many, made his entry, and has brought to his work in it that same degree of patient inquisitiveness, plodding industry and painstaking experiment that has so richly rewarded others in the same line of endeavor, namely, the endeavor both to create new things and to effect such new combinations of old things as will adapt them to new uses. We know that the colored man has accomplished something—indeed, a very great deal—in the field of invention, but it would be of the first importance to us now to know exactly what he has done, and the commercial value of his productions. Unfortunately for us, however, this can never be known in all its completeness.

A very recent experiment in the matter of collecting information on this subject has disclosed some remarkably striking facts, not the least interesting of which is the very widespread belief among those who ought to know better that the colored man has done absolutely nothing of value in the line of invention. This is but a reflex of the opinions variously expressed by others at different times on the subject of the capacity of the colored man for mental work of a high order. Thomas Jefferson's remark that no colored man could probably be found who was capable of taking in and comprehending Euclid, and that none had made any contribution to the civilization of the world through his art, would perhaps appear somewhat excusable when viewed in the light of the prevailing conditions in his day, and on which, of course, his judgment was based; but even at that time Jefferson knew something of the superior quality of Benjamin Banneker's mental equipment, for it is on record that they exchanged letters on that subject.

Coming down to a later day, when our race as a whole had shared, to some extent at least, in the progress of learning, so well informed an exponent of popular thought as Henry Ward Beecher is said to have declared that the whole African race in its native land could be obliterated from the face of the earth without loss to civilization, and yet Beecher knew, or should have known, of the scholarly Dr. Blyden, of Liberia, who was at one time president of the college of Liberia at Monrovia, and minister from his country to the Court of St. James, and whose contributions to the leading magazines of Europe and America were eagerly accepted and widely read on both continents.

Less than ten years ago, in a hotly contested campaign in the State of Maryland, a popular candidate for Congress remarked, in one of his speeches, that the colored race should be denied the right to vote because "none of them had ever evinced sufficient capacity to justify such a privilege," and that "no one of the race had ever yet reached the dignity of an inventor." Yet, at that very moment, there was in the Library of Congress in Washington a book of nearly 500 pages containing a list of nearly 400 patents representing the inventions of colored people.

Only a few years later a leading newspaper in the city of Richmond, Va., made the bold statement that of the many thousands of patents annually granted by our government to the inventors of our country, "not a single patent had ever been granted to a colored man." Of course this statement was untrue, but what of that? It told its tale, and made its impression—far and wide;

and it is incumbent upon our race now to outrun that story, to correct that impression, and to let the world know the truth.

In a recent correspondence that has reached nearly two-thirds of the more than 12,000 registered patent attorneys in this country, who are licensed to prosecute applications for patents before the Patent Office at Washington, it is astonishing to have nearly 2,500 of them reply that they never heard of a colored inventor, and not a few of them add that they never expect to hear of one. One practising attorney, writing from a small town in Tennessee, said that he not only has never heard of a colored man inventing anything, but that he and the other lawyers to whom he passed the inquiry in that locality were "inclined to regard the whole subject as a joke." And this, remember, comes from practising lawyers, presumably men of affairs, and of judgment, and who keep somewhat ahead of the average citizen in their close observation of the trend of things.

Now there ought not to be anything strange or unbelievable in the fact that in any given group of more than 10,000,000 human beings, of whatever race, living in our age, in our country, and developing under our laws, one can find multiplied examples of every mental bent, of every stage of mental development, and of every evidence of mental perception that could be found in any other similar group of human beings of any other race; and yet, so set has become the traditional attitude of one class in our country toward the other class that the one class continually holds up before its eyes an imaginary boundary line in all things mental, beyond which it seems unwilling to admit that it is possible for the other class to go.

Under this condition of the general class thought in our country it has become the fixed conviction that no colored man has any well-defined power of initiative, that the colored man has no originality of thought, that in his mental operations he is everlastingly content to pursue the beaten paths of imitation, that therefore he has made no contribution to the inventive genius of our country, and so has gained no place for himself in the ranks of those who have made this nation the foremost nation of the world in the number and character of its inventions.

That this conclusion with reference to the colored man's inventive faculty is wholly untrue I will endeavor now to show.

In the world of invention the colored man has pursued the same line of activity that other men have followed; he has been spurred by the same necessity that has confronted other men, namely, the need for some device by which to minimize the exactions of his daily toil, to save his time, conserve his strength and multiply the results of his labor. Like other men, the colored man sought first to invent the thing that was related to his earlier occupations, and as his industrial pursuits became more varied his inventive genius widened correspondingly. Thus we find that the first recorded instances of patents having been granted to a colored man—and the only ones specifically so designated—are the two patents on corn harvesters which were granted in 1834 and 1836 to one Henry Blair, of Maryland, presumably a "free person of color," as the law was so construed at that time as to bar the issuance of a patent to a slave.

With the exception of these two instances the public records of the Patent Office give absolutely no hint as to whether any one of the more than 1,000,000 patents granted by this government to meritorious inventors from all parts of the world has been granted to a colored inventor. The records make clear enough distinctions as to nationality, but absolutely none as to race. This policy of having the public records distinguish between inventors of different nationalities only is a distinct disadvantage to the colored race in this country.

If the inventors of England or France or Germany or Italy, or any other country, desire to ascertain the number and character of the inventions patented to the citizens of their respective countries, it would require but a few hours of work to get exact statistics on the subject, but not so with the colored inventor. Here, as elsewhere, he has a hard road to travel.

In fact, it seems absolutely impossible to get even an approximately correct answer to that question for our race. Whatever of statistics one is able to get on this subject must be obtained almost wholly in a haphazard sort of way from persons not employed in the Patent Office, and who must, in the great majority of cases, rely on their memory to some extent for the facts they give. Under such circumstances as these it is easy to see the large amount of labor involved in getting up such statistics as may be relied upon as being true.

There have been two systematic efforts made by the Patent Office itself to get this information, one of them being in operation at the present time. The effort is made through a circular letter addressed to the thousands of patent attorneys throughout the country, who come in contact often with inventors as their clients, to popular and influential newspapers, to conspicuous citizens of both races, and to the owners of large manufacturing industries where skilled mechanics of both races are employed, all of whom are asked to report what they happen to know on the subject under inquiry.

The answers to this inquiry cover a wide range of guesswork, many mere rumors and a large number of definite facts. These are all put through the test of comparison with the official records of the Patent Office, and this sifting process has evolved such facts as form the basis of the showing presented here.



**ELIJAH McCOY** 

There is just one other source of information which, though its yield of facts is small, yet makes [Pg 6] up in reliability what it lacks in numerousness; and that is where the inventor himself comes to the Patent Office to look after his invention. This does not often happen, but it rarely leaves anything to the imagination when it does happen.

Sometimes it has been difficult to get this information by correspondence even from colored inventors themselves. Many of them refuse to acknowledge that their inventions are in any way identified with the colored race, on the ground, presumably, that the publication of that fact might adversely affect the commercial value of their invention; and in view of the prevailing sentiment in many sections of our country, it cannot be denied that much reason lies at the bottom of such conclusion.

Notwithstanding the difficulties above mentioned as standing in the way of getting at the whole truth, something over 1,200 instances have been gathered as representing patents granted to colored inventors, but so far only about 800 of these have been verified as definitely belonging to that class.

These 800 patents tell a wonderful story of the progress of the race in the mastery of the science of mechanics. They cover inventions of more or less importance in all the branches of mechanics, in chemical compounds, in surgical instruments, in electrical utilities, and in the fine arts as well.

From the numerous statements made by various attorneys to the effect that they have had several colored clients whose names they could not recall, and whose inventions they could not identify on their books, it is practically certain that the nearly 800 verified patents do not represent more than one-half of those that have been actually granted to colored inventors, and that the credit for these must perhaps forever lie hidden in the unbreakable silence of official records.

But before directing attention specifically to some of the very interesting details disclosed by this latest investigation into the subject, let us consider for a brief moment a few of the inventions which colored men have made, but for which no patents appear to be of record.

I should place foremost among these that wonderful clock constructed by our first astronomer, Benjamin Banneker, of Maryland. Banneker's span of earthly existence covered the 75 years from 1731 to 1806. His parentage was of African and English origin, and his mental equipment was far above the average of his day and locality in either race. Aside from his agricultural pursuits, on which he relied for a livelihood, he devoted his time mainly to scientific and mechanical studies, producing two things by which he will be long remembered: An almanac and a clock. The latter he constructed with crude tools, and with no knowledge of any other timepiece except a watch and a sundial; yet the clock he made was so perfect in every detail of its mechanical construction, so accurate in the mathematical calculations involved, that it struck the hours with faultless precision for twenty years, and was the mechanical wonder of his day and locality.

Another instance is that of Mr. James Forten, of Philadelphia, who is credited with the invention of an apparatus for managing sails. He lived from 1766 to 1842, and his biographer says he amassed a competence from his invention and lived in leisurely comfort as a consequence.

Still another instance is that of Robert Benjamin Lewis, who was born in Gardiner, Me., in 1802. He invented a machine for picking oakum, which machine is said to be in use to-day in all the essential particulars of its original form by the shipbuilding interests of Maine, especially at Bath.

It is of common knowledge that in the South, prior to the War of the Rebellion, the burden of her industries, mechanical as well as agricultural, fell upon the colored population. They formed the great majority of her mechanics and skilled artisans as well as of her ordinary laborers, and from this class of workmen came a great variety of the ordinary mechanical appliances, the invention of which grew directly out of the problems presented by their daily employment.

There has been a somewhat persistent rumor that a slave either invented the cotton gin or gave to Eli Whitney, who obtained a patent for it, valuable suggestions to aid in the completion of that invention. I have not been able to find any substantial proof to sustain that rumor. Mr. Daniel Murray, of the Library of Congress, contributed a very informing article on that subject to the Voice of the Negro, in 1905, but Mr. Murray did not reach conclusions favorable to the contention on behalf of the colored man.

It is said that the zigzag fence, so commonly used by farmers and others, was originally introduced into this country by African slaves.

We come now to consider the list of more modern inventions, those inventions from which the element of uncertainty is wholly eliminated, and which are represented in the patent records of [Pg 7] our government.

In this verified list of nearly 800 patents granted by our government to the inventors of our race we find that they have applied their inventive talent to the whole range of inventive subjects; that in agricultural implements, in wood and metal-working machines, in land conveyances on road and track, in seagoing vessels, in chemical compounds, in electricity through all its wide range of uses, in aeronautics, in new designs of house furniture and bric-à-brac, in mechanical toys and amusement devices, the colored inventor has achieved such success as should present to the race a distinctly hope-inspiring spectacle.

Of course it is not possible, in this particular presentation of the subject, to dwell much at length upon the merits of any considerable number of individual cases. This feature will be brought out more fully in the larger publication on this subject which the writer now has in course of preparation. But there are several conspicuous examples of success in this line of endeavor that should be fully emphasized in any treatment of this subject. I like to tell of what has been done by Granville T. Woods and his brother Lyates, of New York; by Elijah McCoy, of Detroit; by Joseph Hunter Dickinson, of New Jersey; by William B. Purvis, of Philadelphia; Ferrell and Creamer, of New York; by Douglass, of Ohio; Murray, of South Carolina; Matzeliger, of Lynn; Beard, of Alabama; Richey, of the District of Columbia; and a host of others that I could mention.

Foremost among these men in the number and variety of his inventions, as well as in the commercial value involved, stands the name of Granville T. Woods. Six years ago Mr. Woods sent me a list of his inventions patented up to that time, and there were then about thirty of them, since which time he has added nearly as many more, including those which he perfected jointly with his brother Lyates. His inventions relate principally to electrical subjects, such as telegraphic and telephonic instruments, electric railways and general systems of electrical control, and include several patents on means for transmitting telegraphic messages between moving trains.

The records of the Patent Office show that for valuable consideration several of Mr. Woods' patents have been assigned to the foremost electrical corporations of the world, such as the General Electric Company, of New York, and the American Bell Telephone Company, of Boston. These records also show that he followed other lines of thought in the exercise of his inventive faculty, one of his other inventions being an incubator, another a complicated and ingenious amusement device, another a steam-boiler furnace, and also a mechanical brake.

Mr. Woods is, perhaps, the best known of all the inventors whose achievements redound to the credit of our race; and in his passing away he has left us the rich legacy of a life successfully devoted to the cause of progress.

In the prolific yield of his inventive genius, Elijah McCoy, of Detroit, stands next to Granville T. Woods.

So far as is ascertainable from the office records Mr. McCoy obtained his first patent in July, 1872, and the last patent was granted to him in July, 1912. During the intervening forty years he continued to invent one thing after another, completing a record of nearly forty patents on as many separate and distinct inventions. His inventions, like those of Woods', cover a wide range of subjects, but relate particularly to the scheme of lubricating machinery. He is regarded as the pioneer in the art of steadily supplying oil to machinery in intermittent drops from a cup so as to avoid the necessity for stopping the machine to oil it. His lubricating cup was in use for years on stationary and locomotive machinery in the West, including the great railway locomotives, the boiler engines of the steamers on the Great Lakes, on transatlantic steamships, and in many of our leading factories. McCoy's lubricating cups were famous thirty years ago as a necessary equipment in all up-to-date machinery, and it would be rather interesting to know how many of the thousands of machinists who used them daily had any idea then that they were the invention of a colored man.

Another inventor whose patents occupy a conspicuous place in the records of the Patent Office, and whose achievements in that line stand recorded as a credit to the colored man, is Mr. William B. Purvis, of Philadelphia. His inventions also cover a variety of subjects, but are directed mainly along a single line of experiment and improvement. He began, in 1882, the invention of machines for making paper bags, and his improvements in this line of machinery are covered by a dozen patents; and a half dozen other patents granted Mr. Purvis include three patents on electric railways, one on a fountain pen, another on a magnetic car-balancing device, and still another for a cutter for roll holders.



#### **ROBERT A. PELHAM**

Another very interesting instance of an inventor whose genius for creating new things is <sup>[Pg 9]</sup> constantly active, producing results that express themselves in terms of dollars for himself and others, is that of Mr. Joseph Hunter Dickinson, of New Jersey. Mr. Dickinson's specialty is in the line of musical instruments, particularly the piano. He began more than fifteen years ago to invent devices for automatically playing the piano, and is at present in the employ of a large piano factory, where his various inventions in piano-player mechanism are eagerly adopted in the construction of some of the finest player pianos on the market. He has more than a dozen patents to his credit already, and is still devoting his energies to that line of invention.

The company with which he is identified is one of the very largest corporations of its kind in the world, and it is no little distinction to have one of our race occupy so significant a relation to it, and to hold it by the sheer force of a trained and active intellect.

Mr. Frank J. Ferrell, of New York, has obtained about a dozen patents for his inventions, the larger portion of them being for improvements in valves for steam engines.

Mr. Benjamin F. Jackson, of Massachusetts, is the inventor of a dozen different improvements in heating and lighting devices, including a controller for a trolley wheel.

Mr. Charles V. Richey, of Washington, has obtained about a dozen patents on his inventions, the last of which was a most ingenious device for registering the calls on a telephone and detecting the unauthorized use of that instrument. This particular patent was only recently taken out by Mr. Richey, and he has organized a company for placing the invention on the market, with fine prospects of success.

Hon. George W. Murray, of South Carolina, former member of Congress from that State, has received eight patents for his inventions in agricultural implements, including mostly such different attachments as readily adapt a single implement to a variety of uses.

Henry Creamer, of New York, has made seven different inventions in steam traps, covered by as many patents, and Andrew J. Beard, of Alabama, has about the same number to his credit for inventions in car-coupling devices.

Mr. William Douglass, of Kansas, was granted about a half dozen patents for various inventions in harvesting machines. One of his patents, that one numbered 789,010, and dated May 2, 1905, for a self-binding harvester, is conspicuous in the records of the Patent Office for the complicated and intricate character of the machine, for the extensive drawings required to illustrate it and the

[Pg 8]

lengthy specifications required to explain it—there being thirty-seven large sheets of mechanical drawings and thirty-two printed pages of descriptive matter, including the 166 claims drawn to cover the novel points presented. This particular patent is, in these respects, quite unique in the class here considered.

Mr. James Doyle, of Pittsburgh, has obtained several patents for his inventions, one of them being for an automatic serving system. This latter device is a scheme for dispensing with the use of waiters in dining rooms, restaurants and at railroad lunch counters. It was recently exhibited with the Pennsylvania Exposition Society's exhibits at Pittsburgh, where it attracted widespread attention from the press and the public. The model used on that occasion is said to have cost nearly \$2,000.

In the civil service at Washington there are several colored men who have made inventions of more or less importance which were suggested by the mechanical problems arising in their daily occupations.

Mr. Shelby J. Davidson, of Kentucky, a clerk in the office of the Auditor for the Post Office Department, operated a machine for tabulating and totalizing the quarterly accounts which were regularly submitted by the postmasters of the country. Mr. Davidson's attention was first directed to the loss in time through the necessity for periodically stopping to manually dispose of the paper coming from the machine. He invented a rewind device which served as an attachment for automatically taking up the paper as it issued from the machine, and adapted it for use again on the reverse side, thus effecting a very considerable economy of time and material. His main invention, however, was a novel attachment for adding machines which was designed to automatically include the government fee, as well as the amount sent, when totalizing the money orders in the reports submitted by postmasters. This was a distinct improvement in the efficiency and value of the machine he was operating and the government granted him patents on both inventions. His talents were recognized not only by the office in which he was employed by promotion in rank and pay, but also in a very significant way by the large factory which turned out the adding machines the government was using. Mr. Davidson has since resigned his position and is now engaged in the practice of the law in Washington, D. C.

Mr. Robert Pelham, of Detroit, is similarly employed in the Census Bureau, where his duties include the compilation of groups of statistics on sheets from data sent into the office from the thousands of manufacturers of the country. Unlike most of the other men in the departmental service, Mr. Pelham seemed anxious to get through with his job quickly, for he devised a machine used as an adjunct in tabulating the statistics from the manufacturers' schedules in a way that displaced a dozen men in a given quantity of work, doing the work economically, speedily and with faultless precision, when operated under Mr. Pelham's skilful direction. Mr. Pelham has also been granted a patent for his invention, and the proved efficiency of his devices induced the United States government to lease them from him, paying him a royalty for their use, in addition to his salary for operating them.

Mr. Pelham's mechanical genius is evidently "running in the family," for his oldest son, now a high-school youth, has distinguished himself by his experiments in wireless telegraphy, and is one of the very few colored boys in Washington holding a regular license for operating the wireless.

Mr. W. A. Lavalette, of the Government Printing Office, the largest printing establishment in the world, began his career as a printer there years before the development of that art called into use the wonderful machines employed in it to-day; and one of his first efforts was to devise a printing machine superior to the pioneer type used at that time. This was in 1879, and he succeeded that year in inventing and patenting a printing machine that was a notable novelty in its day, though it has, of course, long ago been superseded by others.

I have reserved for the last the name and work of Jan Matzeliger, of Massachusetts. Although there are barely half a dozen patents standing in his name on the records of the office, and his name is little known to the general public, there are, I think, some points in his career that easily make him conspicuous above all the rest, and I have found the story really inspiring.

As a very young man Matzeliger worked in a shoe shop in Lynn, Mass., serving his apprenticeship at that trade. Seeking, in the true spirit of the inventor, to make two blades of grass grow where only one grew before, he devised the first complete machine ever invented for performing automatically all the operations involved in attaching soles to shoes. Other machines had previously been made for performing a part of these operations, but Matzeliger's machine was the only one then known to the mechanical world that could simultaneously hold the last in place to receive the leather, move it forward step by step so that other co-acting parts might draw the leather over the heel, properly punch and grip the upper and draw it down over the last, plait the leather properly at the heel and toe, feed the nails to the driving point, hold them in position while being driven, and then discharge the completely soled shoe from the machine, everything being done automatically, and requiring less than a minute to complete a single shoe.

This wonderful achievement marked the beginning of a distinct revolution in the art of making shoes by machinery. Matzeliger realized this, and attempted to capitalize it by organizing a stock company to market his invention; but his plans were frustrated through failing health and lack of business experience, and shortly thereafter, at the age of 36, he passed away.

He had done his work, however, under the keen eye of the shrewd Yankees, and these were quick to see the immense commercial importance of the step he had accomplished. One of these bought

[Pg 10]

the patent and all of the stock that he could find of the company organized by Matzeliger. This fortunate purchase laid the foundation for the organization of the United Shoe Machinery Company, the largest and richest corporation of the kind in the world. (See, in Munsey's Magazine of August, 1912, on page 722, biographical sketch of Mr. Sidney Winslow, millionaire [Pg 11] head of the United Shoe Machinery Company.)

Some idea may be had of the magnitude of this giant industry, which is thus shown to have grown directly out of the inventions of a young colored man, by recalling the fact that the corporation represents the consolidation of forty-one different smaller companies, that its factories cover twenty-one acres of ground, that it gives employment daily to 4,200 persons, that its working capital is guoted at \$20,860,000, and that it controls more than 300 patents representing improvements in the machines it produces. From an article published in the Lynn (Mass.) News, of October 3, 1889, it appears that the United Shoe Machinery Company, above mentioned, established at Lynn a school, the only one of its kind in the world, where boys are taught exclusively to operate the Matzeliger type of machine; that a class of about 200 boys and young men are graduated from this school annually and sent out to various parts of the world to instruct others in the art of handling this machine.

Some years before his death Matzeliger became a member of a white church in Lynn, called the North Congregational Society, and bequeathed to this church some of the stock of the company he had organized. Years afterward this church became heavily involved in debt, and remembering the stock that had been left to it by this colored member, found, upon inquiry, that it had become very valuable through the importance of the patent under the management of the large company then controlling it. The church sold the stock and realized from the sale more than enough to pay off the entire debt of the church, amounting to \$10,860. With the canceled mortgage as one incentive, this church held a special service of thanks one Sunday morning, on which occasion a life-sized portrait of their benefactor looked down from the platform on the immense congregation below, while a young white lady, a member of the church, read an interesting eulogy of the deceased and the pastor, Rev. A. J. Covell, preached an eloquent sermon on the text found in Romans 13:8-"Owe no man anything but to love one another." Let us cherish the hope that the spirit and the significance of that occasion sank deep in the hearts of those present.

There are those who have tried to deny to our race the share that is ours in the glory of Matzeliger's achievements. These declare that he had no Negro blood in his veins; but the proof against this assertion is irrefutable. Through correspondence with the mayor of Lynn, a certified copy of the death certificate issued on the occasion of Matzeliger's death has been obtained, and this document designates him a "mulatto."

Others have tried the same thing with reference to Granville T. Woods, a too kind biographer, writing of him in the *Cosmopolitan* in April, 1895, stating that he had no Negro blood in him. But those who knew Mr. Woods personally will readily acquit him of the charge of any such ethnological errancy.

Another effort to detract from Matzeliger's fame comes up in the criticism that his machine was not perfect, requiring subsequent improvements to complete it and make it commercially valuable. Matzeliger was as truly a pioneer, blazing the way for a great industrial triumph, as was Whitney, or Howe, or Watt, or Fulton, or any other one of the scores of pioneers in the field of mechanical genius. The cotton gin of to-day is, of course, not the cotton gin first given to the world by Whitney, but the essential principles of its construction are found clearly outlined in Whitney's machine. The complex and intricate sewing machine of to-day, with its various attachments to meet the needs of the modern seamstress, is not the crude machine that came from the brain of Elias Howe; the giant locomotives that now speedily cover the transcontinental distance between New York and San Francisco bear but slight resemblance to the engine that Stephenson first gave us. In fact, the first productions of all these pioneers, while they disclosed the principles and laid the foundations upon which to build, resemble the later developments only "as mists resemble rain;" but these pioneers make up the army of capable men whose toil and trial, whose brawn and brain, whose infinite patience and indomitable courage have placed this nation of ours in the very front rank of the world's inventors; and, standing there among them, with his name indelible, is our dark-skinned brother, the patient, resourceful Matzeliger.

In the credit here accorded our race for its achievements in the field of invention our women as well as our men are entitled to share. With an industrial field necessarily more circumscribed than that occupied by our men, and therefore with fewer opportunities and fewer reasons, as well, for exercising the inventive faculty, they have, nevertheless, made a remarkably creditable [Pg 12] showing. The record shows that more than twenty colored women have been granted patents for their inventions, and that these inventions cover also a wide range of subjects-artistic, utilitarian, fanciful.

The foregoing facts are here presented as a part only of the record made by the race in the field of invention for the first half century of our national life. We can never know the whole story. But we know enough to feel sure that if others knew the story even as we ourselves know it, it would present us in a somewhat different light to the judgment of our fellow men, and, perhaps, make for us a position of new importance in the industrial activities of our country. This great consummation, devoutly to be wished, may form the story of the next fifty years of our progress along these specific lines, so that some one in the distant future, looking down the rugged pathway of the years, may see this race of ours coming up, step by step, into the fullest

#### NOTE

The writer has in preparation, for early publication, a book which will deal more in detail with the subject of this pamphlet, presenting the names of all inventors, so far as ascertained, with the titles of their inventions and the dates and numbers of their patents, together with brief biographical sketches of many of the more active inventors.

#### Published by **THE CRISIS PUBLISHING COMPANY** Copyrighted, 1913, by Henry E. Baker

### \*\*\* END OF THE PROJECT GUTENBERG EBOOK THE COLORED INVENTOR: A RECORD OF FIFTY YEARS \*\*\*

Updated editions will replace the previous one-the old editions will be renamed.

Creating the works from print editions not protected by U.S. copyright law means that no one owns a United States copyright in these works, so the Foundation (and you!) can copy and distribute it in the United States without permission and without paying copyright royalties. Special rules, set forth in the General Terms of Use part of this license, apply to copying and distributing Project Gutenberg<sup>™</sup> electronic works to protect the PROJECT GUTENBERG<sup>™</sup> concept and trademark. Project Gutenberg is a registered trademark, and may not be used if you charge for an eBook, except by following the terms of the trademark license, including paying royalties for use of the Project Gutenberg trademark. If you do not charge anything for copies of this eBook, complying with the trademark license is very easy. You may use this eBook for nearly any purpose such as creation of derivative works, reports, performances and research. Project Gutenberg eBooks may be modified and printed and given away—you may do practically ANYTHING in the United States with eBooks not protected by U.S. copyright law. Redistribution is subject to the trademark license, especially commercial redistribution.

#### START: FULL LICENSE THE FULL PROJECT GUTENBERG LICENSE PLEASE READ THIS BEFORE YOU DISTRIBUTE OR USE THIS WORK

To protect the Project Gutenberg<sup>™</sup> mission of promoting the free distribution of electronic works, by using or distributing this work (or any other work associated in any way with the phrase "Project Gutenberg"), you agree to comply with all the terms of the Full Project Gutenberg<sup>™</sup> License available with this file or online at www.gutenberg.org/license.

## Section 1. General Terms of Use and Redistributing Project Gutenberg<sup>™</sup> electronic works

1.A. By reading or using any part of this Project Gutenberg<sup>™</sup> electronic work, you indicate that you have read, understand, agree to and accept all the terms of this license and intellectual property (trademark/copyright) agreement. If you do not agree to abide by all the terms of this agreement, you must cease using and return or destroy all copies of Project Gutenberg<sup>™</sup> electronic works in your possession. If you paid a fee for obtaining a copy of or access to a Project Gutenberg<sup>™</sup> electronic work and you do not agree to be bound by the terms of this agreement, you may obtain a refund from the person or entity to whom you paid the fee as set forth in paragraph 1.E.8.

1.B. "Project Gutenberg" is a registered trademark. It may only be used on or associated in any way with an electronic work by people who agree to be bound by the terms of this agreement. There are a few things that you can do with most Project Gutenberg<sup>™</sup> electronic works even without complying with the full terms of this agreement. See paragraph 1.C below. There are a lot of things you can do with Project Gutenberg<sup>™</sup> electronic works if you follow the terms of this agreement and help preserve free future access to Project Gutenberg<sup>™</sup> electronic works. See paragraph 1.E below.

1.C. The Project Gutenberg Literary Archive Foundation ("the Foundation" or PGLAF), owns a compilation copyright in the collection of Project Gutenberg<sup>™</sup> electronic works. Nearly all the individual works in the collection are in the public domain in the United States. If an individual work is unprotected by copyright law in the United States and you are located in the United States, we do not claim a right to prevent you from copying, distributing,

performing, displaying or creating derivative works based on the work as long as all references to Project Gutenberg are removed. Of course, we hope that you will support the Project Gutenberg<sup>™</sup> mission of promoting free access to electronic works by freely sharing Project Gutenberg<sup>™</sup> works in compliance with the terms of this agreement for keeping the Project Gutenberg<sup>™</sup> name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project Gutenberg<sup>™</sup> License when you share it without charge with others.

1.D. The copyright laws of the place where you are located also govern what you can do with this work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project Gutenberg<sup>™</sup> work. The Foundation makes no representations concerning the copyright status of any work in any country other than the United States.

1.E. Unless you have removed all references to Project Gutenberg:

1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg<sup>™</sup> License must appear prominently whenever any copy of a Project Gutenberg<sup>™</sup> work (any work on which the phrase "Project Gutenberg" appears, or with which the phrase "Project Gutenberg" is associated) is accessed, displayed, performed, viewed, copied or distributed:

This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at <u>www.gutenberg.org</u>. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

1.E.2. If an individual Project Gutenberg<sup>TM</sup> electronic work is derived from texts not protected by U.S. copyright law (does not contain a notice indicating that it is posted with permission of the copyright holder), the work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase "Project Gutenberg" associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E.1 through 1.E.7 or obtain permission for the use of the work and the Project Gutenberg<sup>TM</sup> trademark as set forth in paragraphs 1.E.8 or 1.E.9.

1.E.3. If an individual Project Gutenberg<sup>™</sup> electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E.1 through 1.E.7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg<sup>™</sup> License for all works posted with the permission of the copyright holder found at the beginning of this work.

1.E.4. Do not unlink or detach or remove the full Project Gutenberg<sup>TM</sup> License terms from this work, or any files containing a part of this work or any other work associated with Project Gutenberg<sup>TM</sup>.

1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in paragraph 1.E.1 with active links or immediate access to the full terms of the Project Gutenberg<sup>™</sup> License.

1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg<sup>™</sup> work in a format other than "Plain Vanilla ASCII" or other format used in the official version posted on the official Project Gutenberg<sup>™</sup> website (www.gutenberg.org), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original "Plain Vanilla ASCII" or other form. Any alternate format must include the full Project Gutenberg<sup>™</sup> License as specified in paragraph 1.E.1.

1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project Gutenberg<sup>™</sup> works unless you comply with paragraph 1.E.8 or 1.E.9.

1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project Gutenberg<sup>m</sup> electronic works provided that:

• You pay a royalty fee of 20% of the gross profits you derive from the use of Project Gutenberg<sup>™</sup> works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project Gutenberg<sup>™</sup> trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you

prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, "Information about donations to the Project Gutenberg Literary Archive Foundation."

- You provide a full refund of any money paid by a user who notifies you in writing (or by email) within 30 days of receipt that s/he does not agree to the terms of the full Project Gutenberg<sup>™</sup> License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project Gutenberg<sup>™</sup> works.
- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.
- You comply with all other terms of this agreement for free distribution of Project Gutenberg  $^{\mbox{\tiny M}}$  works.

1.E.9. If you wish to charge a fee or distribute a Project Gutenberg<sup>TM</sup> electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from the Project Gutenberg Literary Archive Foundation, the manager of the Project Gutenberg<sup>TM</sup> trademark. Contact the Foundation as set forth in Section 3 below.

#### 1.F.

1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do copyright research on, transcribe and proofread works not protected by U.S. copyright law in creating the Project Gutenberg<sup>™</sup> collection. Despite these efforts, Project Gutenberg<sup>™</sup> electronic works, and the medium on which they may be stored, may contain "Defects," such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that damage or cannot be read by your equipment.

1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the "Right of Replacement or Refund" described in paragraph 1.F.3, the Project Gutenberg Literary Archive Foundation, the owner of the Project Gutenberg<sup>™</sup> trademark, and any other party distributing a Project Gutenberg<sup>™</sup> electronic work under this agreement, disclaim all liability to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.

1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND - If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.

1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you 'AS-IS', WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.

1.F.6. INDEMNITY - You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing copies of Project Gutenberg<sup>™</sup> electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project Gutenberg<sup>™</sup> electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project Gutenberg<sup>™</sup> work, (b) alteration, modification, or additions or deletions to any

Project Gutenberg<sup>™</sup> work, and (c) any Defect you cause.

### Section 2. Information about the Mission of Project Gutenberg™

Project Gutenberg<sup>™</sup> is synonymous with the free distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project Gutenberg<sup>™</sup>'s goals and ensuring that the Project Gutenberg<sup>™</sup> collection will remain freely available for generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project Gutenberg<sup>™</sup> and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at www.gutenberg.

# Section 3. Information about the Project Gutenberg Literary Archive Foundation

The Project Gutenberg Literary Archive Foundation is a non-profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation's EIN or federal tax identification number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state's laws.

The Foundation's business office is located at 809 North 1500 West, Salt Lake City, UT 84116, (801) 596-1887. Email contact links and up to date contact information can be found at the Foundation's website and official page at www.gutenberg.org/contact

# Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation

Project Gutenberg<sup>™</sup> depends upon and cannot survive without widespread public support and donations to carry out its mission of increasing the number of public domain and licensed works that can be freely distributed in machine-readable form accessible by the widest array of equipment including outdated equipment. Many small donations (\$1 to \$5,000) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit www.gutenberg.org/donate.

While we cannot and do not solicit contributions from states where we have not met the solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: www.gutenberg.org/donate

# Section 5. General Information About Project Gutenberg<sup>™</sup> electronic works

Professor Michael S. Hart was the originator of the Project Gutenberg<sup>™</sup> concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project Gutenberg<sup>™</sup> eBooks with only a loose network of volunteer support.

Project Gutenberg<sup>TM</sup> eBooks are often created from several printed editions, all of which are confirmed as not protected by copyright in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our website which has the main PG search facility: <u>www.gutenberg.org</u>.

This website includes information about Project Gutenberg<sup>™</sup>, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to subscribe to our email newsletter to hear about new eBooks.