

IMPROVEMENTS IN MACHINERY.

BY R. B. RICHARDS, IN THE "LUMBER WORLD."

When I was about sixteen years of age, my father got an idea into his head that I had the making of a first-rate millwright in me, and so took me in hand to develop my capabilities. How well he succeeded I shall not attempt to say, nor do I believe the reader would be interested in knowing. I have, so long as I can remember, had a liking, natural or acquired, I can't say which, for machinery and mechanical combinations, and, looking back to my boyhood, can recall many crude attempts to devise means to lighten, what I then believed were the arduous labors imposed upon me. My inventive faculties were not, however, equal to the task of decreasing the amount of physical exertion necessary to the accomplishment of my allotted tasks, although I experienced little difficulty in performing them in a manner essentially different from that usually accepted as the most sensible.

As I grow to manhood, I gave no little time and thought to devising new methods of performing mechanical operations, and shall never forget the time when my first application for a patent was allowed; nor my feelings, when I received, at our little country post office, the huge envelope, with the portentous words printed thereupon, "United States Patent Office; Official Business." That envelope stamped me as a man of note; the government had, after patient labor, and diligent search, conceded the fact that I had discovered and utilized something new; that this something new was worthy of governmental recognition, and that so valuable was it, I should have sole property right to, and in it, for the term of fourteen years, with a privilege of extension of this property right for seven years longer if I desired. Our little town had never been the home of an inventor, and I at once became an object of interest to every dweller therein. No one seemed to give the subject of how I should realize a fortune out of my invention, a thought, nor did I at first. I was an inventor; I had a patent, and what more could a man want? I was congratulated on every hand, and more than one expressed the hope that I would not think of removing from the village. I endeavored to wear my honors modestly, but it is not in human nature to resist being condescending to those who have looked upon you as being something inferior to them, when, by reason of the exertion of your own powers, you are enabled to overstep them in popularity, and I am afraid I more than once entertained the suspicion that I was superior to the majority of my companions.

After some months it occurred to me that it would be a good idea to sell my patent. I confess it appeared singular that capitalists and manufacturers in the large cities had not been around to see me in reference to buying me out, but attributing this to ignorance, upon their part, of the fact that such a patent had been granted, I started out to enlighten them. How well I remember the old mother, as with one hand in mine, and the other holding one corner of her apron, she bade me good-bye, with many injunctions as to care of my money and person, and cautious to "beware of them patent fellows." Dear old lady, she had full faith in her boy's smartness, if the "old man" was at times somewhat skeptical. I had never been very far or very long away from home before this, and the importance of the trip rendered it necessary that all the village should be aware of the date of my intended departure, so that I lacked not for hand-shakings and good wishes when I started out. That period of my life is particularly pleasant for me to remember. I had a patent; I was going to sell it; I should come home rich. Railroads in those days were not so numerous as now, and I had to go by stage some sixty miles to reach my destination, where I arrived late and tired in the evening. The next morning, after a long talk with the hotel-keeper, in which I told him I was an inventor and had a patent to sell, information which did not seem to impress him as I thought it should, I set out to find a firm that was engaged in the manufacture of such machinery as I had invented, and a brief sketch of my interview may possibly prove interesting.

Entering the office I was met by an old gen-

tleman, with a red flannel shirt on, sleeves rolled above his elbows, hands covered with iron filings and oil, who inquired what I wanted. I said:

"You manufacture and sell wood-working machinery?"

"Oh, yes," he replied, "can we do anything for you? Our stock is quite complete, and our terms quite as liberal as other makers."

"I am not desiring to purchase, not being engaged in the wood-working line, at least to an extent that would justify me in the employment of machinery," I said, "but I have given a good deal of study to mechanical devices, and have a patent—"

"I am quite busy," interrupted he, "and am not very much interested in such matters anyhow, so you will excuse me if I say that we have all the inventive ability in our establishment that we at present can employ."

"But," I replied, "I am not looking for employment. I have a very good trade that keeps me busy—"

"Better stick to it," he broke in.

"Well," said I, "as you do not appear to care about looking into the matter, I will not take up your time. There is another establishment here engaged in the same line, and if you will tell me where they are located, I will not trouble you further."

"Well," said he, "you have a patent. What is it for?"

"A saw table," I replied.

"Have you a model with you?"

"Yes, and my patent."

"Well, I'll look at it, although such things don't interest me, and I have but little time to spare. Come in and sit down."

We went into an inner room, and I took out my model, which, by the way, had cost me many days of patient labor, and was very elaborately gotten up, and he examined it. "Let's see your patent," said he.

I handed it to him, and after a few minutes examination, he returned it with the remark, "I don't see as it would be to our advantage to take hold of it."

"Is there any objection to the use of the device?" I asked.

"None at all," said he, "if you can get any one to use it."

"Well, if there is no objection to the use of it, why wouldn't it be to your advantage to secure the right to build it?"

"How much do you consider the patent worth?" he asked.

"It ought to be worth about ten thousand dollars," I replied.

"The question," said he "is not what it ought to be worth, but what is it worth?"

"If I could dispose of it at once, I would be willing to take five thousand dollars for it," I answered.

"Good," said he, "now we are arriving at a basis for negotiations. Let me ask you how long a time it took you to conceive and develop this invention?"

I could not see what he was driving at, so replied that from childhood I had been noted for "tinkering" and trying to invent something, and that I believed I had a gift that way.

"Let me put the question to you another way," said he. "How long did you study upon this saw table before you conceived the idea of the combination you have made?"

"Oh, no time to speak of," said I, "it came to me all at once, as it were; that is, I conceived the idea that a saw table susceptible of the changes of position and relations to the saw, such as I have made, would be very convenient to the user, and of money value to me, so after a few days of thought upon the matter, I made a model and applied for a patent."

"Did it take you a month to do all this?" he asked.

"I think not so long as that," said I.

"What did your patent cost you?"

"Nearly fifty dollars."

"Just step out into the shop with me a few moments," said he.

We went out, and, going straight to the "buzz-saw," he picked up a piece of board, and, in a few moments' time, by the aid of some thin strips or thicker blocks, had cut that board up into pieces, the sawed edges of which presented various angles to the original flat surface. Calling a boy, he directed him to take the pieces

into the engine-room and we returned to the office.

When we were seated he said, "I have taken you out into my shop only to show you that upon my old saw table I can perform the same operations that you can with your improved and patented arrangement. I can do everything you can, with as great accuracy, but possibly not quite so quickly. You come to me with your invention, that has taken but little of your time to devise, and necessitated but a slight outlay of money, and ask me to pay you the snug sum of five thousand dollars for your patent. If I could not, upon my old saw table, do what you can upon your improved one, and if it was essential that these operations be performed, the price you put upon your patent might be reasonable. If I buy your patent, I must have some prospect of getting my money, with a reasonable profit, back again. I fail, at present, to see how this can be done, and, of course, am not inclined to purchase at your price."

"What, in your opinion, is it worth?" I inquired.

"I should not care to put a value on it," he replied "but I will say this; if your invention were my own, I should not use it for the reason that it would only add to the expense of making an article, in which there is now very little profit, without in any manner adding to its real utility. You are a young man, endeavoring to make money without working for it, unconsciously perhaps, but nevertheless endeavoring to do so. Take my advice, go home, and to work. You say you have a good trade. Stick to your trade, and save your money. Invent all you please, so long as you don't neglect your business, but don't attempt to sell a patent until you know you have something that will facilitate operations, thereby cheapening the cost of performing them, or that will simplify the method of performing them, or that will permit of new operations being performed."

I went home, but it took me a long time to comprehend what the old man meant.

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