

CONNECTICUT AT THE PARIS EXPOSITION.

BY ELIZABETH GERTRUDE DANIEL.

California monopolizes the fruit section but I found Pennock apples from E. C. Warner of New Haven, Gilliflowers apples sent by Chas. Moore of Southington, Champion quinces from New Haven county completed the representation. Methought of the luscious Hale peaches and asked for them. Not because I expected to find fresh specimens but I hungered for more display by the Nutmeg State. One regrets very much, if one is from Connecticut, that we take such small part in the exposition. You will recall my observation that this state is strongest in mechanics. Proof of this is furnished by the following summary:

The Pratt and Whitney Company cover considerable space and to an interested party must furnish valuable information. The judges thought well enough of their products to confer the Grand Prize on the concern. The Bullard Company, machinery makers, of Bridgeport, are directly adjoining the Hartford exhibit and the Hende Machine Company are close by. The awarding committee missed them evidently.

A. D. Quint of Hartford shows a drill and the Rice Gear Company, also of the Capitol City, exhibit one of their machines. All of the above are at the Vincennes Annex, "six miles away" from the main portion of the exposition. No doubt interested parties will seek the displays but I cannot help harboring the suspicion that they are working at a disadvantage. You would not feel this so keenly but you are an American and foreign-

ers' spaces are located right in the track of the crowds. Machinery galore is to be found at the Palace of Mines and Metals at the Champ de Mars.

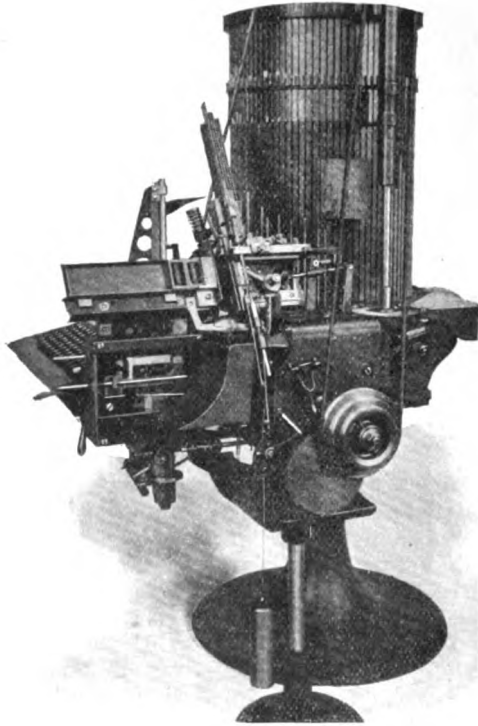
It is no special pleasure to cast reflections on the United States commissioner but would humbly inquire as to where he was when the good sites were being apportioned.

The Shelton Tack Company, from the village bearing the same name, the Stanley Rule and Level Company and Stanley Works of New Britain, and Yale and Towne Company of Stamford occupy with displays, show cases in the hardware section, Champ de Mars. The last two concerns were awarded prizes. Not for the beauty of display I can assure you. They were for the most part very commonplace. These exhibits are all in the balcony of the building and therefore not very well placed. For some particularly French reason the moving staircases by which you may ascend to the upper floor charge 2 cents per ascension. It is not a matter of two cents which keeps these balconies deserted but the unwarranted expense involves a stubborn principle. The American Hosiery Company of New Britain, prize winners, are similarly at a disadvantage for they, like the Canfield Rubber Shield Company of Bridgeport are "balconists." The Eagle Lock Company, Terryville, can enter the same complaint but find some consolation perhaps in a prize for excellence of production. The singular thing about most of exhibits just mentioned is they seem to have

no "living representative." I understand certain concerns in Paris look out for the interests of several displays. A number of returns to the same sections in quest of some one to "talk to" failed to disclose him. It is my opinion that if I spent enough money to make a display I would spend a little more and have some one "on the spot" to capture the in-

trical machinery a prize went to the Hart and Hegeman Company of Hartford.

Williams Typewriters are shown and the Unitype Company of Manchester have another display of their latest mechanical compositor. The Hartford Typewriter is in the French section. I do not know why. You would scarcely recognize that little



DES JARDINS TYPE JUSTIFYING MACHINE.

ternational patronage sure to be found at such an enterprise.

Rockville upholds her reputation for textiles. The Hockanum Association and the New England and Springdale Mills were all awarded highest prizes. They are well placed on the main floor.

The Veeder Cyclometer has an octagonal case under which repose tiny booklets describing the merits of the smart little counters. For elec-

Parkville product in the maze of Frenchy literature, signs, etc., which surround it.

Connecticut can claim another exhibit of which it can be proud. I refer to the exhibits of the Des-Jardins Type Justifier Co. and of Mr. B. M. DesJardins of Hartford. It has been officially announced that there has been awarded on these inventions three diplomas, a gold medal, a silver medal and an honorable men-



DES JARDINS TYPE-WRITING ADDING MACHINE.

tion, the largest number awarded to any other Connecticut exhibitor. Below is shown illustrations of the type justifying machine, the space where it is on exhibition in the American Publishers' Building, the typewriter adding machine and a portrait of the inventor, Mr. B. M. DesJardins.

Mr. T. L. DeVinnie, the well-known printer of New York and an expert in matters pertaining to the mechanical department of his business, has stated that he has found in his own experience that the cost of justifying type composition averages considerably more than one-half of the expense of composition. By the present system, the first corrections, revision, author's corrections, revisions and re-revisions all require rejustification. The great expense of this work is manifest even to the layman.

It will be seen that the DesJardins type justifier is a matter of great interest to all printers and publishers, and Hartford is to be congratulated in having the company establish its business there. "In designing his justifier," says a writer in the "Inland Printer," "Mr. DesJardins has aimed to eliminate all of this unpleasant feature of type composition, which all together, including corrections and alterations, amounts to fully one-half of the cost, where good work is required."

Mr. Charles H. Cochrane, secretary of the New York Typothetae, writing for the "American Printer" gives the following description of the machine exhibited:

"The work of the justifier begins after the type has left the channels, and has reached a point at the right side of the keyboard. The types are stacked up into words by the movement of a little star gear, the words being separated by thin brass separators, which serve as temporary spaces during the composition. These separators are slightly longer than the type, and are fitted with pronged ends.

When the line is composed as tully as desired the operator touches a line lever to start the justifier. The line is then lifted into a second channel, swung slightly to one side, being brought under the measuring bar of the computing device. Another part of the computing device has been previously adjusted by the striking of the space keys in composing the line. The device being thus informed of the amount of shortage in the line, and of the number of spaces into which such shortage must be divided, decides on the proper spaces for justifying, selecting them from among four thicknesses. The words of the line are taken one at a time, and held while the brass separator is discarded and a space of the proper size substituted.

The process of justifying a line of type is strictly automatic, and occupies only about ten seconds, and the justifier may be speeded higher if necessary, but in ordinary work the machine will outstrip the swiftest operator, so that by the time the second line has been set the justifier is waiting to receive it and repeat the process.

The automatic mechanism comprises three main groups of devices. The principal group is the one which determines the sizes or width of spaces. It is a mathematical instru-



EXHIBIT OF DES JARDINS JUSTIFIEUR
COMPANY. PARIS EXPOSITION.

ment capable of performing all kinds of examples. This computing device is a complete scientific mathematical instrument, capable of performing general arithmetical operations, as adding, dividing, giving the product and remainder (the duty which it performs in the type justifier), multiplying, subtracting, and extracting the square root. It can be used for performing a number of peculiar examples in mechanics that cannot be very easily performed in any other way without the use of many figures. This computing device very easily and gracefully performs the example in division needed by the line which it has in its possession, giving as a result the number and size of the piles of spaces which the machine is to use for each line.

The second group of mechanism is called the action of the machine, that is, the part which does the handling of the words with their separators, and which collects and inserts the spaces. It is really a separate device and may be easily detached from the rest of the machine.

The third group comprises a short shaft with its three operating cam wheels, and produces all the motions for the other two groups, directing the various strokes necessary.

The general operation of the machine is very simple. While the operator is striking the space keys to bring the separators between the words, the machine is made to count the number of spaces, and when the line is pushed up into the justifier, the measuring bar of the computing device is displaced to give the length of the line. The inter-operation of these two devices performs the example and directs the machine to take the spaces of the widths needed, and when this is done the machine has nothing to do but insert the spaces and deposit the line on the receiving galley."

In closing this description of the DesJardins Justifier it will be interesting to hear what the Scientific American says of its remarkable accuracy: "In properly proportioning his spaces, the printer calculates by the eye, as best he can, the spaces required between the words of a line,



B. M. DES JARDIN.

and the greater the accuracy required the more time will be consumed in justification, but this machine secures absolute mathematical accuracy, such as is demanded in the best work, and leaves no room for carelessness or bad judgement."

The French Journal "La Machine a Ecrire" for September, devotes its leading article to the DesJardins Type-writing Adding Machine which occupies a prominent place among the type-writer exhibits at Champ de Mars. The writer refers to the inventor as "truly belonging to that type of American inventors, to that race which has produced its Franklin and its Edison." The following description of the Adding Machine is taken from the August number of the "Stationer and Printer," London.

"This attachment, with a few changes in the connections, can be fastened to the side of any of the regular typewriters. It is operated by the regular keys of the machine, which are connected at the will of the operator whenever the column to be added is reached. It is then set for the number of figures to be written by a motion which also locates the carriage of the machine at the proper place, and when the right number of figures is written the keys are automatically disconnected, leaving the machine free to write words and figures without disturbing the adding machine. When the bill or statement is finished the operator writes the figures shown on the register at the bottom of the column, the attachment having performed the addition while the figures were being written."

In addition to the two labor saving machines referred to, Mr. DesJardins exhibited models showing the computing device as operated in the Justifier and a slightly modified form showing its various applications as a scientific instrument capable of working all examples on the ground rules.

In the Fine Arts (Beaux Arts)

William M. Chase has been awarded a prize.

I journeyed to the forestry section. What a bitter disappointment not to see a single revolver of Connecticut make. Not a rifle. Not a gun. Why have our past-masters at the art of their manufacture chosen to conceal their cleverness? Why have they missed this opportunity to convince the world and gain much trade thereby? It is almost a crime. The Bridgeport Wood Finishing Company deserved the prize they won for veneers. I am assured that no better specimens of wood finishing exist. Surely I saw none surpassing at the exposition.

The Columbia and Electric Vehicle Company have an exhibit at the Champ de Mars and another at the Vincennes annex.

The Columbia Bicycle was awarded the grand prix in competition with all other American wheels shown at the Paris Exposition.

The manufacturers of Columbias took the American cycle industry at its birth and have led it through each step of its progress. Master minds in mechanics have given their ripest thought to perfecting the Columbia; to harmonizing and improving its parts—to embodying in it every feature of excellence. The models which are shown here are the result of what has thus been done to keep the Columbia at the front for twenty-three years,—covering a most remarkable progress in things mechanical.

The company's product has been represented in many industrial expositions and it has never failed to win first place whenever and wherever awards have been made according to a fixed standard of excellence.

The photograph here gives you an idea of the showing made by the great Russell and Erwin Company of New Britain. A concern which could make a display to bring substantial praise. The exhibit pictured is by the Geo. A. Fuller Company of New York, builders, contractors for the

Broadway Chambers. You will observe, if you observe closely, samples of Russell and Erwin's locks. They are in the lower right hand corner. They furnished the locks for the skyscraper and sent the half dozen specimens for the Fuller Company exhibit. Surely not a very ambitious representation for a concern of its size.

his own country to introduce. The exposition would have been a grand chance to convert the old world to the strength and compactness of the American lock.

Mr. Robert L. Fuller, who is in charge of the exhibit illustrated, told me that the idea of buttons in the door to release the spring lock fairly took foreigners' breaths away. They



AMERICAN BICYCLE CO.'S EXHIBIT.

French people marvel at the cleverness of American locks. The Yale pattern is practically unknown. Other countries are equally surprised at this particular example of Yankee ingenuity. Here is apparently a golden opportunity neglected. On the voyage across I was introduced to a German gentleman who had an immense packing case filled with Connecticut locks. Samples he was carrying to

are so used to clumsy keys that our improvements seem magical. The night key of the house my husband and I stopped at was large enough for a prison lock and an old fashioned one at that. And yet in every other way the people were most progressive.

Connecticut beer (the Quinnipiac Brewing Company's decoction) and Heublein's Cocktails were close

neighbors at the Agricultural building. I scarcely think I have underrated the State's representation. The need of a third paper on the subject is not apparent.

To the volumes on the exposition

I will not attempt an addition. There was much worth seeing and coming many miles to witness. True, some was mediocre, but withal it was a splendid spectacle.



THE SYLVAN SINGER.

BY BURTON L. COLLINS.

He poised upon a bough and overflowed with song,
The song the Joys forbade him long to hold ;
And as it flooded my entranced soul,
How common seemed the earthly harps attuned for praise or gold.