

capacity of fourteen inches, came next in order. It has a continual cut and no back stroke. An adjustable table forms a part of the invention, and the whole carries a belt from one-half to two and a quarter inches. A one, two, three and four sided moulder was also on view, with a capacity of eight inches face. These machines are made for either one or four sides, and the same machines are also made in wooden frames. A splendid sample of mechanical skill was shown in the shape of an iron Lathe and Planer for iron work. Although this Company is of comparatively recent date, yet it finds employment for a large number of hands, and may safely be regarded as one of the great mercantile fixtures of the country.

McKechnie and Bertram, Dundas, had an extensive display of iron and wood working machinery in operation, noticeable among which was a double surface planing and matching machine of the largest size. A four-sided moulding machine, simple, but capable of accomplishing a great deal of work, was also among their list. An immense iron brake lathe, weighing over eight tons, made expressly for a prominent engine-builder, was on view. Its advantages are that it is a self-acting and screwing lathe. There were several other machines of their make on the ground, the details of which require more space than we can give.

The Dundas Tool and Machine Company showed an improved machine for making others. A universal radial arm drilling machine, easily adjusted to bore in any direction or at any angle, is a most useful piece of mechanism.

The Joseph Hall Manufacturing Company, Oshawa, had on view a splendid lot of agricultural machinery, besides an apparatus designated a "Middlings Purifier," and for procuring a superior quality of flour with a larger yield to the bushel than usually obtained.

The Fire King Manufacturing Company, Toronto, exhibited a chemical steam engine, fire extinguisher and hook and ladder. The usefulness of these machines, particularly the fire-extinguisher, is becoming recognized daily. The application of carbonic acid gas is not new, but its usefulness as a fire-destroying agent cannot be disputed. The articles on view appeared to be well made in every particular.

W. C. Nunn, Belleville, also sent a chemical fire engine called the "Little Giant," said to possess great force as a fire-extinguishing agent, and to have greater control over a large fire than any other chemical engine made. The one on view combined simplicity with readiness of action, and seemed well calculated to accomplish all that is claimed for it.

The Johnson Patent Force Pump is another useful fire-extinguishing appliance, and possesses many recommendations in its favour. It is simple, cheap and reliable, and a decided preference for it was expressed by one of the prominent officials of the Great Western Railway. The testimony of an eminent firm in its behalf is conclusive, and it is decidedly one of the best and most simple inventions of the day.

SEWING MACHINES.

First on the list was the "Webster," made by the Canada Sewing Machine Company, Hamilton, (agent, H. C. Nunn, Toronto.) The praise which this popular machine has so justly earned rests purely upon its merits. The fact that it has carried off a prize in England, where the number of competitors is much larger than here, is no small recommenda-

tion in its favour. The simplicity and quality of construction renders it a most reliable article, and it does not readily get out of repair. Its tension is perfect, the shuttle is of the most improved kind, and possesses an extra large bobbin, thus regulating the strain upon the thread, which is always the same. It can be adapted to any kind of work. It is thoroughly tested before being sent out of the factory, and in elegance of finish it holds its own with any other machine. After a few hours' practice the operator can work it with perfect ease. Among its other advantages, it has a revolving "Pressure Foot," enabling the needle to be more readily fitted and threaded. The attachments are all of the best workmanship and of the most complete and useful kind. Another machine manufactured by the same Company, and on exhibition, was the "Little Canadian," a hand shuttle machine, with a patent "Leaf Supporter" attached, simple in operation, and free from that buzzing sound which is so annoying to many persons. Indeed it is almost noiseless, works easily, and is altogether a most reliable machine. The Company claim that it will last for years without getting out of repair. It presents a specimen of solidity, without clumsiness, which goes a long way to confirm their statement. Every stitch which other machines will do, this will also perform satisfactorily, and the usual complications of "threading" are by a simple contrivance avoided, thereby saving time and temper to the operator. A gentleman of large experience in the manufacture of sewing machines in Europe, personally endorses all that has been said with reference to the "Webster."

The Gates' Family Sewing Machine.—This machine is of local manufacture, being made in Toronto. Although the Gates is comparatively a new machine, it has kept pace with the improvements in others of the kind. To those makers who are desirous of keeping their places in the front rank of this important branch of manufacture, it becomes imperatively necessary that something more than the ordinary details of a sewing machine should be shown, and unless all the modern improvements suggested by long experience are combined in addition to the simple principles of the apparatus, they soon fall behind and are forgotten. This important consideration the maker of this machine has kept well in view, and we can safely affirm that this machine will hold its own with any other in the market. It is essentially, as its name implies, a Family sewing machine, and is especially designed for domestic work, although, if necessary, it will as readily operate upon heavy goods. Four thicknesses of stout overcoating were sewn together as easily as the finest material, without producing any strain upon the mechanism. In design it is tasteful and neat, not too lavish of ornament, and great care appears to have been taken in the minor points. There is not one part of it which will not bear thorough inspection.

The "Home" Sewing Machine, exhibited by W. A. White & Co., Toronto. The principal qualities claimed for this machine, which is of American manufacture, are rapidity, silent working, and ease of motion, lightness of construction, and durability of workmanship. It combines easiness of running with lightness of make. The sample of work submitted was fully equal to the famous "Wheeler & Wilson" machine, the cost being far less. The price is as low as can be, consistent with good workmanship and quality of stitch. The "Home" Sewing Machine