It is doubtful whether any single house among the wholesale clothbinders of London, has made more rapid strides to the fore within recent years than that of Messrs. FISHER & SON. In order to meet their customers' demands it has been necessary to constantly extend the premises, and the result is that Messrs. Fisher are now occupying two large buildings that cover something over 3,000 square feet of ground. But it is the enterprise shown by the propriety of this house in the matter of machinery that has done so much to build up the business. The very latest sewing, stitching, cutting, and blocking machines are at work, enabling the firm to turn out many thousand bound books per day, besides large quantities of magazines, etc. Messrs. Fisher were, we believe, the first to introduce several of the latest improvements in machinery known to the trade.

The present proprietors are Messrs. Thomas, James, and Augustus Fisher, three brothers. Mr. Fisher explained to us that his grandfather came from Chester, as a binder, and set up for himself in the West End. The then Bishop of London was one of his patrons, and he was also engaged in the binding of the Library of Westminster Abbey. In 1826 the father of the present proprietors was born. He was brought up to the trade and was a practical worker in all branches. He started in the city in 1856, taking over an older-established business in Ivy-lane, and this establishment was the nucleus of the present large clothbinding establishment. The late Mr. Fisher eventually removed from Ivy-lane to Bride-court, Fleet-street. The city business was always devoted to wholesale binding, and after some years it migrated from Bride-court to Church-entry, where it was established in a portion of the large building still occupied by the firm. In 1881 the whole of the building was acquired. About 1870 the eldest son, Mr. Thos. Fisher, entered the business, and was followed by his two brothers at intervals of two years. They all learnt the practical working of the trade. In June of last year the fine building in Cloister-court was secured and fitted up with every convenience. At first only a portion of the present building in Cloister-court was taken, but when the opportunity was given them to take a lease of the whole, Messrs. Fisher immediately took advantage of it. The firm has, therefore, now this building covering 2,200 square feet, and the other in Church-entry covering 12,000 square feet, yet more room is needed.

Speaking of his father, Mr. Thos. Fisher remarked that he worked up to the day of his death, directing the business from the Isle of Wight, where his illness detained him till his death in 1876. Steam-power was introduced to a small extent during his lifetime.

We were here shown a specimen of a case which had undergone thirteen different blockings. It was in no way a gaudy affair, the colours having been very deftly blended in order to produce the tones that met the eye.

Upon taking a run round the two buildings attention was drawn to the spacious basement in Cloister-court, which was mainly used as a store-house for bound books. The gas engine of 8-H.P. indicated, was also quietly doing its duty, and here and there were buckets placed handy in case of fire. In a corner on the first floor was a peculiar looking arrangement, which our guide explained was an automatic knife-grinding machine. “It will grind a guillotine knife in about ten minutes.” Attention was next called to an American turn-table cutting machine, which was capable of turning out six hundred completely cut books an hour. The knife of this machine is fixed some two feet above the bed, the books being guaged and clamped in a turn-table in front. In clamping, two piles of books are placed back to back so as to offer the entire four sides in readiness for cutting. When all is ready, the table is immediately carried by the machinery up to the knife. A smart workman will turn out a considerable percentage more work by this machine than is possible by any other in the market. But it requires practice, and Messrs. Fisher found considerable difficulty when this machine was first placed in the hands of workmen unused to its peculiarities. On the same floor stood a line of hydraulic presses, all pumped up by engine power, and a few feet distant the steam backing machine was working with wonderful ease and quietness. To all appearances it did its work perfectly. A steam “rounder” was also working effectively close by. On the second floor of the Cloister-court works there were several of Smythe’s and also some of Brehmer’s sewing machines at work. The “Smythe” were capable of running off sixty sheets per minute. On the same floor were two Martini folding machines, each equal to turning out 3,000 folded sheets an hour, while in a quiet corner a happy faced young lady was at work upon one of Elliott’s thread stitchers. This is a wonderful piece of mechanism that will make a perfect three-hole stitch and tie the thread in a knot. This is the only machine we know of that will tie a knot, but how it is done we dare not attempt to describe. It is almost needless to add that the “Elliott” is an American invention, although now manufactured in England.

In the Church-entry works we stayed to admire some of the blocking machinery, the engine power for which is furnished by a 14-H.P. indicated Otto engine. In a solid line stood three or four of Carl Krause’s perfected steam blockers. They are wonderful machines, perfect in every way, notably in the inking apparatus.
A piece of board no larger than a shilling, or as large as any ordinary cover in common demand, receives equal treatment once fairly placed upon this machine. An average of upwards of 300 workers are constantly engaged, and the workrooms are well lighted and arranged for the benefit of the workpeople.

### Sprinkling and Marbling.

After acquiring some amount of skill in the sprinkling of leather as explained in our last number, it would be well to extend your operations to that class of colouring known as "dabbing," in which the same colouring liquids are used, but they are applied by means of small pieces of sponge. For this purpose it is necessary carefully to select pieces according to the kind of dab required.

**French Dabs** are produced on calf coloured in the usual way with salts of tartar, or on English calf bought ready coloured in red, green, slate, or light brown; for the latter a stout paste wash must be first applied as on uncoloured calf. The sponges must be of soft and open texture, so that the stains made may be as distinct as possible, and not running one into another. They need be no larger than a good sized walnut, but must have a flat side. Try them on a piece of waste leather, and if they are too close in any part, nick little pieces out with a pair of shears till the spots are fairly separated.

Be careful to keep each sponge to its own colour, and for dabbing, the salts of tartar may be used the full strength given.

When the books are thoroughly dry, squeeze out the sponge in the copperas, leaving it fairly charged with colour, but so that it will not run, then gently dab over the whole surface of the cover (except the lettering piece), shifting the sponge now to the right, now to the left, that the dabs shall not be too uniform. Having covered the surface, next take the brown sponge, similarly charged, and dab over the black stains, making them deeper where you touch them, and making a sort of shadow where it touches on the plain leather. This close dabbing on green and red calf is very pretty and effective, and after being glaired polished and varnished closely resembles granite.

**Cat's Paw** requires a little more careful and considerate execution in order to make it look carelessly arranged; it is produced in the same manner, but the sponge must be very open and has to be cut to suit its purpose. Cats are not scarce animals, so get hold of one and look at the little velvet pads under its feet. Dab one of the fore feet in black and lay it on a piece of leather; the stain produced you must try to imitate by Nicking out a piece of sponge to the pattern set. With your black sponge be most particular, the brown does not so much matter. Having your sponges in order dab over with the black, leaving a space between each stain as broad each way as your forefinger, then brown over with the other sponge to make the black deeper and the shadows in and around the black stains. The effect aimed at is that of a cat having walked to and fro over the book, and is often adopted as a suitable style for old work. It is only used on browned calf, at least we never remember seeing it on any other colour.

French dabs are sometimes used on panel calf, leaving either a plain or sprinkled panel, and we once saw a whole bound calf book so dabbed that it appeared to be half-bound with dabbed back and corners. To preserve the straight line of division for any such fancy it is only necessary to lay a straight edged sheet of stout paper on the lines required, and you may then dab away freely. In any design you may fancy you are your own masters in this class of work, and with a little thought many novel effects may be produced.

In all the foregoing directions we have referred only to salts of tartar as the browning medium, but it often happens that the tint produced is not warm enough to the fancy, and more of a yellowish tint is desired. This may be effected by washing over the browned cover with picric acid dissolved in water. You must, however, be careful in storing this acid in a dry state as mixed with alkalis, like soda or salts of tartar, it becomes a dangerous explosive. Another warm brown or yellow is produced by putting a little annatto into a quart of water, with half-a-pound of common soda, and using it hot.

**Tortoise-shell Sprinkle.** Before going into the process of marbling, there are some effects produced by a combination of sprinkling and dabbing, which, though little used now, might be more often employed: the best of these is known as tortoise-shell.

Paste wash thoroughly and brown with salts of tartar lightly. Then stain the calf further with the following: half-an-ounce of turmeric powder put into half-a-pint of methylated spirit. This must be allowed to stand for several days, giving an occasional shake up till the whole of the colour is drawn out. Next sprinkle with coarse black spots. Then dab with separate sponges dipped in blue, red, and black, made as follows:—Blue: one ounce powdered indigo to one ounce of oil of vitriol, mix thoroughly and let it stand for two or three days, then add twelve ounces of water. Red: quarter-of-a-pound of bauxite dust, two ounces of powdered cochineal, and a small piece of alum. Boil in a quart of good malt vinegar and stir it thoroughly; use hot. After each of these colourings the leather must thoroughly dry before applying the next, and when complete and dry, take a stiff brush and give it a good rubbing, then a thin coat of paste wash, and finish in the usual manner.

The golden time of ornamental art in binding was the half century between 1525 and 1575. For the first twenty years the Italians had the best of it; during the other thirty the French took the lead, which they never lost.

Everyone who appreciates a good book will wish to honour it with the best binding he can afford, and thus show without words his high opinion of his loved companion.

Germany, the birthplace of printing, is still the first bookselling country in the world. Distributed over 800 towns there are 5,473 booksellers and publishers.
Our Portrait Gallery—No. 5

Thomas Fisher.

James Fisher.

Augustus Fisher.