

Machinery and Appliances.

PATENT PICKER STEEPER.

PATENTEE AND MAKER: MR. JAMES GREEN,
EWODD MILLS, BLACKBURN.

A very costly adjunct of the power-loom, owing to its heavy wear and tear, is the picker. These are constructed of hides, specially prepared, and ordinarily termed "Buffalo," presumably from the fact that a long time ago these animals supplied the bulk, if not the whole, of the material from which pickers were made. If so, we do not wonder that they have become extinct, or very nearly so. So far as is known there are now in the territories of the United States only a few specimens left, and these are being eagerly sought in order that they may be carefully preserved, much as in a few places in

fly spindle of the loom. The best preservative and prolonger of the life of the picker when in use has been found to be oil, with which it is next sought to saturate it by immersion in a tank of oil. From the nature of the material this is an exceedingly slow process requiring several months to complete, and to make matters worse no means exist by which its thoroughness can be tested. This, and the preliminary drying, necessitates the maintenance of a larger stock and a correspondingly large outlay of capital which is thus locked up and rendered quite unproductive. Another mischief arises from the long time required. A bad quality of picker might be received, and would be paid for months before they could be tested or used, and under those circumstances the difficulty and trouble of getting compensation may easily be conjectured.

Experience of the inconveniences of the ordinary process of treatment of pickers led Mr. James Green, a Blackburn manufacturer,

means of the lever handle which works on a pivot at F, can then be raised until the catch E engages, and swung clear so as to drip into the oil tank; the pickers are then taken out when they will be found to be evenly and thoroughly saturated.

We feel assured many of our practical readers will be pleased to have their attention drawn to this new and valuable adjunct to a weaving shed. Mr. Green may be communicated with at the above address, and some additional particulars may also be found in our advertising columns.

ERRATUM.—In the description of Messrs. G. H. Holden and Co's. Improved Stop-motion Twisting Machine, last week, in the second line of the second column below the illustration, by a slip of the pen the word "machine" erroneously occurs; which, as will be obvious to the reader, should be "spindle."

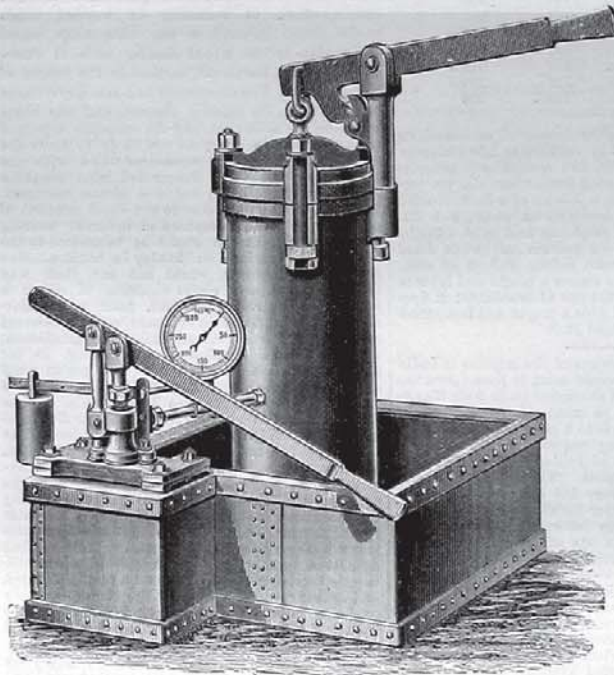


Fig. 1.

PATENT PICKER STEEPER—MR. JAMES GREEN, EWODD MILLS, BLACKBURN.

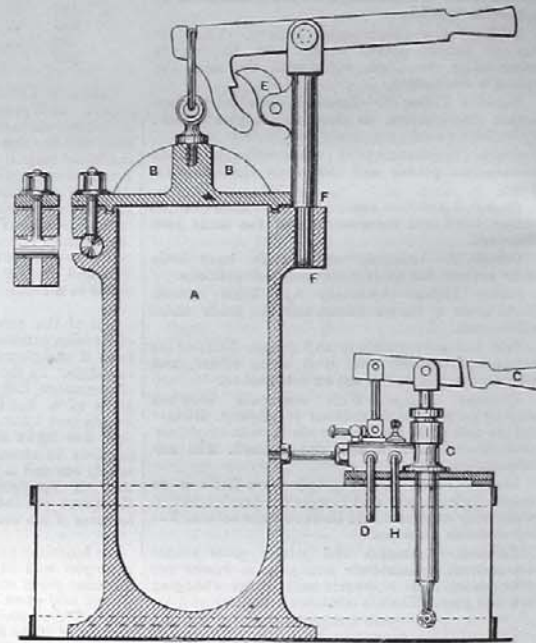


Fig. 2.

this country the breed of ancient British white cattle are preserved from extinction. "Buffalo" hide is now manufactured from the hides of other animals.

In the processes of manufacture of "buffalo" a main purpose is to render it as tough as possible in order that it may withstand the terribly rough usage to which the picker is unavoidably put. This end is very successfully accomplished as all will admit who have any practical acquaintance with the subject. When, however, the pickers have been received by the manufacturer they have to be carefully dried and cleared from all aqueous moisture, as the presence of this would soon lead to its destruction. The dyeing process takes two or three months, the pickers in strings being usually placed in hot steam-heated rooms, or over the boilers. When the drying is finished, they are still not ready for use. To use them in that state would be to subject them to quick destruction, owing to the frictional heat developed by their rapid movement upon the

to endeavour to obviate them, the result being the invention of his new process which has now stood the test of two or three years' practical use in his own mill and that of several other manufacturers in the same district. Briefly stated the process may be termed saturation under pressure. For effecting this Mr. Green invented and constructed the machine which is termed "a picker steeper" and which we illustrate here-with in elevation and section. The pickers, previously dried, are placed in the upright cylinder A, Fig. 2, which has a capacity 10 strings of ordinary make. The cylinder is then filled with oil and the cover B bolted down; more oil is then forced into the cylinder by means of the force pump C, so as to create therein a pressure of 350lb. to the square inch, at which it has been found the pickers become perfectly saturated. After allowing the pickers to remain under pressure for a week, the relief valve D is opened for a second in order to reduce the pressure, and the cylinder lid is then unbolted; this, by

O proprietario do "THE TEXTILE MERCURY" roga respeitosamente aos seus leitores que usem as columnas de avisos que tiverem a bondade de mencionar, quando escreverem aos avisadores, nome d'este jornal.

Il proprietario di "THE TEXTILE MERCURY" prega quegli dei suoi lettori che rispondano agli annunci nelle sue colonne d'aver la bontà di menzionare nelle loro risposte il nome di questo giornale.

The grandchildren of the late M. Chevreul on Tuesday last acquainted the Director of the Museum of Natural History with their intention to present to the State the library and manuscripts left by the illustrious chemist.

THE LATE MR. BRIGHT.—A movement is on foot to place a replica of Mr. Adam Acton's bust of the late Mr. John Bright, now on exhibition at the Royal Academy, in the library of the National Liberal Club. Amongst the subscribers are Lords Rosebery, Granville, Wolverton, and Aberdeen. Mr. A. D. Castle is honorary secretary and treasurer of the fund, and at the suggestion of Lord Aberdeen the individual subscription will be limited to one guinea.

IMPROVED FRICTION GEAR.

MAKERS: MESSRS. PERKIN AND CO., LIMITED, LEEDS.

The accompanying illustration shows an improved arrangement of friction gear which is admirably adapted for driving winches where the necessity arises for running both ways. The framing, which is constructed in the strongest and most substantial manner, is securely fixed to the top of the cisterns. On the end of the winch shaft is fitted a friction pulley turned v shape. The pedestal which carries the end of this shaft is fitted into a grooved bed with planed faces so that it can be moved either way by turning the screw which is attached to the pedestal. On both sides of the winch shaft is fixed a short shaft on which are mounted friction pulleys grooved out to suit the v pulleys on winch shaft. These shafts derive their motion from spur wheels of equal diameters which are connected to the driving shaft by an additional wheel or wheels as the position may require.

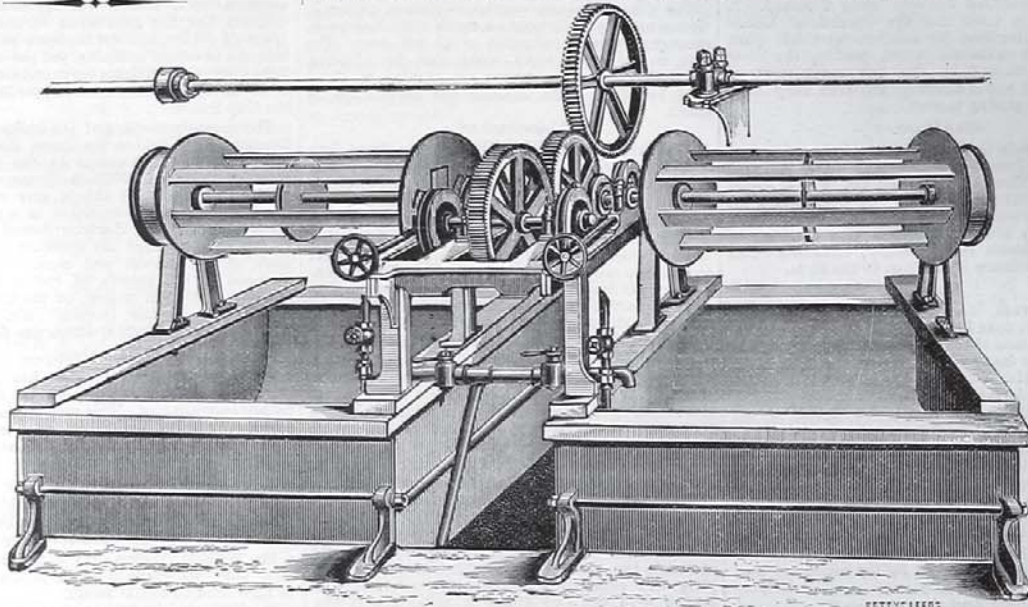
Our practical readers will be able to see the adaptability of this gearing to their own requirements whilst they will also discern its merits.

FLAX SUPPLY ASSOCIATION.

The twenty-first annual meeting of the Flax Association was held in the Chamber of Commerce, Belfast, yesterday week—the Mayor (C. C. Connor, Esq.) presiding.

The Mayor said that the Flax Supply Association was primarily established to encourage the growth of flax in Ireland. The acreage under flax for 1888 exhibits a considerable decrease upon the previous year, being over 16,600 acres less. The yield per acre, owing to the fact of the flax having scutched out better than it did during the previous year shows an increase in weight to the markets of probably 25 per cent.; at the same time the quality by no means came up to the expectations formed of it. The months of July and August, when warm, dry weather is indispensable for ripening the crops, were excessively cold, and the rainfall abnormally heavy, being almost nine inches. In consequence of this flax was considerably beaten down, as it is called, in almost every part of the country; and farmers, fearing to lose their crop altogether, were tempted to pull it in many cases before it was ripe. The straw in the process of scutching turned out satisfactorily to the farmer, but unfortunately it did not do so to the spinner; the results in the process of hackling and spinning were by no means satisfactory. Altogether the crop of the past year is

the same time led to the increased consumption of foreign yarns, inasmuch as for the year 1888 there was imported into the United Kingdom the large total of eighteen million odd pounds weight, being more than three times what it was in 1885, and almost six times that of 1875. While such a great increase is shown in the imports of yarn it is to be regretted that exports show a steady decrease, being more than 10 per cent. in quantity, and 5 per cent. in value below that of last year. The imports for last year exceed the exports by about four million pounds weight. Upon referring to the figures supplied in the report I find the total number of yards exported is, with the exception of two years—1881 and 1882—the largest since that of the year 1875, thus proving that if our spinners have suffered, owing to the large quantities of yarns put upon our market by foreign competitors, at such low prices, the evil has not been an unmixed one, inasmuch as it has enabled our manufacturers to make goods to compete more successfully in outside markets. While there has been such a large increase in the total yarns exported, the average value per yard shows a slight decrease, which would go to prove that we are shipping a larger quantity of low-class goods. The gross results supply ample evidence that we are able to hold our own in the different markets of the world, notwithstanding the high protective tariffs with which



IMPROVED FRICTION GEAR—MESSRS. PERKIN AND CO., LIMITED, LEEDS.

WILL OF THE LATE MR. JOHN BRIGHT.—The will of the Right Hon. John Bright, M.P., who died at his residence, One Ash, Rochdale, on the 27th March last, was proved on Thursday, in the Manchester District Registry by his two sons, John Albert and William Leatham, who are the executors. The gross personal estate is returned at £86,184; net, £85,829. There are no leaseholds. The testator bequeaths to his son, John Albert Bright, the whole of his furniture and household effects, and his carriages, horses, and harness. He does this, he explains, because it is difficult, or impossible, to divide the things, and he trusts that his said son, will, with the kindness and generosity he has always manifested, give as presents to his brothers and sisters some articles of plate, or furniture, or pictures, or such books, as he may without inconvenience spare, and which it may please them to possess as "memorials of their parents, and of the home of their childhood." By this will (which bears date 29th Feb., 1888), Mr. Bright gives very specific directions as to his burial in the little plot of ground attached to the Friends' Meeting House at Rochdale. In order that the little "God's Acre" may be kept sacred for all time he recommends that the sum of one thousand pounds should be set apart for that purpose. With regard to "One Ash," the testator leaves all the money that may be realised by its sale to his son John Albert absolutely. Portions of his shares in the company "John Bright and Brothers" are given to his sons and daughters. There are no public bequests.

one which must have paid well, notwithstanding which it does not appear that there is any disposition on the part of the farmers to increase the acreage under flax. This is the more to be regretted when we consider the fact that we annually pay about £3,000,000 sterling for foreign flax. . . . All of the gentlemen must have noticed the great difference there is between the hauling of our Irish flax as compared with that obtained from France and Belgium. It is admitted that in many respects, particularly as far as quality is concerned, our Irish flax ought to be the equal of its Continental competitor; but, unfortunately, the way in which it is handled before it reaches the spinner deprives it of much of its market value. Several machines have been introduced during the past few years for the purpose of scutching. Experience, however, has shown that none of these has fulfilled the anticipations which were entertained of them. It would appear to be clear, therefore, that the field is, to some extent, still open for improvements in this direction. With regard to the spinning industry, the number of spindles working in this country appears to be stationary. There is an estimated increase in the number of looms running of fully 2,000; this has consequently largely increased the consumption of yarns, which, while no doubt a benefit to our own spinners, has at

our products are handicapped. The exports of linen and thread show a slight decrease in quantity for the year; but the value is somewhat greater, which is an encouraging feature. The exports of the nondescript goods exhibit a steady increase, and have for the year amounted to close upon one million pounds sterling, whereas five years ago they amounted to only £352,000. Indeed, I might safely say there is no other known industry which provides such extensive and, at the same time, varied employment as the linen trade. I am sorry to hear that the amount of seed imported this year is not, apparently, adequate to sow enough land to bring the crop up, even under favourable circumstances, to the average of last year. It appears that the imports of Dutch seed this year are 47,820 bags, and Riga, 16,392, making a total of 64,212, which, taken upon the basis of two bushels to the statute acre, would be sufficient to sow only 112,000 acres, as against 113,586 acres actually returned for the year 1888, and 130,284 for the year 1887.

To be concluded.

The General Committee of the United Cotton Spinners' Association, Manchester, met yesterday afternoon to consider the replies received to the recent circular letter relating to the adoption of short time. It was resolved to recommend the trade to stop the whole of Whit-week.