



EMERY GRINDING MACHINERY AT THE PARIS EXHIBITION.

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We take from *Engineering* the accompanying engravings of Handyside's pulley grinding machine, made by Messrs. Thomson, Sterne & Co., of Glasgow.

This machine is capable of grinding pulleys with either straight or curved rims, and all the belt pulleys of Messrs. Thomson, Sterne & Co.'s machines are finished by it. Referring to our engraving, it will be seen that the machine consists of a substantial frame on which are mounted two heads, the one carrying an emery wheel and the other a mandrel on which the pulley to be operated upon can be fixed. The first mentioned head can be shifted to and fro along its bed, so as to enable the emery wheel to be brought to bear upon pulleys of different sizes, and, as will be seen from our left hand view, the driving belt arrangements are such that the tension of the belt which gives motion to the emery wheel is not altered by the head being shifted on the bed.

The second frame or head which carries the pulley to be operated upon has more complicated movements. Thus in the first place the frame carrying the mandrel is adjustable toward or from the emery wheel, so as to bring the center line of the mandrel either directly over the center of the base, or at different distances from that center; secondly, the casting on which the mandrel frame immediately rests is capable of being moved to and fro at right angles to the plane in which the emery wheel revolves; and, thirdly, the base which carries this slide has cast on it a strong hollow vertical cylindrical center to which a reciprocating rotary motion can be communicated. Referring to the left hand view, it will be seen that the transverse movement of the pulley carrying frame is imparted by a connecting rod coupled to an adjustable crank pin in a disk crank at the upper end of a short vertical shaft, this shaft carrying a worm wheel into which a driving worm engages. By this arrangement the pulley to be ground can be slowly traversed to and fro across the emery wheel. At the lower end of the vertical shaft just mentioned is another disk crank with an adjustable pin which can be coupled by a suitable rod with an arm on the bottom of the vertical center with which, as we have already stated, the base of the pulley carrying frame is provided. By the use of this crank alone, or by its employment in conjunction with the other crank, combined with the power of adjustment afforded by the upper side of the pulley carrying frame, such a motion is given to the pulley as to impart to its rim any desired convexity.

The right hand view shows clearly the manner in which the pulley under treatment is mounted on its mandrel, and also the arrangement of the gear by which a slow revolving movement is imparted to the latter so as to bring all parts

of the pulley rim successively under the action of the emery wheel. The arrangement of the belt gear for maintaining a proper tension on the belt, while leaving the pulley carrying frame free to move, will be readily understood from an inspection of our engraving without special explanation. One of the great advantages of the machine is that it enables pulleys to be cast much lighter and more nearly to their finished size than would be possible if they had to be turned in a lathe, while when once set it is perfectly automatic in its action.

NOTES OF PATENT OFFICE DECISIONS.**LABELS AND TRADE MARKS.**

Parker filed his application for the registration of a label, which he described as consisting of "the figure of a boy, and the words 'Scratch my back,' surrounded by a border of parallel lines, as shown, the figure and the words being formed of numerous squares, printed, and arranged as represented. This label is for use on cards, or sheets of abrasive paper or cloth, and as a pattern for sample work, to be wrought on the squares, in order to so finish the label when desirable. The cards thus labeled are intended for use in firing friction matches."

The question was, Was it a label, trade mark, or design, or should it be copyrighted? One definition given by Webster of a label is about what the Patent Office regards as being the proper matter to be registered as such: "A narrow strip of silk, paper, parchment, etc., affixed to anything, denoting its contents, ownership, and the like, as the label of a bottle or a package." So far as this definition includes fanciful and arbitrary matter, which may be used for the sole and independent purpose of a trade mark, to denote origin or ownership, it is not applicable to matters registered as labels.

Registrable labels or prints and trade marks are recognized by the terms of the law and the decisions of the courts as applicable only to some kind of merchandise; labels as giving the names of the manufacturers, place of manufacture, nature or quality of goods, directions for their use, and the like; and a trade mark as some arbitrary symbol to distinguish the same from those goods of a similar character made by other persons. The courts have always sustained trade marks and labels on precisely the same principles, and they uniformly discuss these matters as having been affixed, in some way, to goods, as merchandise, and not as constituting the merchandise itself. Thus in *Moorman vs. Hodge* (2 Sawyer, 78) the learned judge, in passing upon an alleged trade mark, stated that he had examined with care a large number of cases involving infringement of trade marks, including all the recent cases which he had been able to find bearing upon the question, and that he had found no case in

which the use of an article or package containing it had been enjoined, unless there was some symbol, word, letter, or form impressed or affixed to the article, and which, considered separately from the article or package, was used as the trade mark.

Now the matter which Parker sought to register was not a label, print, or a trade mark affixed to goods or merchandise, to denote ownership, or the character of the goods, and the like, but was the article itself—a fanciful pattern wrought, or to be wrought, into or upon the article—forming part of the article, and giving to it a certain value, by way of a new appearance, like a new pattern worked upon a slipper. It was not designed to be published as a work of fine art, and therefore was not the subject of copyright.

Summing up the case, therefore, so far as above discussed, it was apparent that the subject matter of Parker's application was not a label, print, or trade mark, or the subject of copyright.

The remaining question to consider was whether the design act applied to the case. The law relating to design provides for the granting of patents to those who, among other things, have invented and produced "any new and original impression, ornament, pattern, print, or picture to be printed, painted, cast, or otherwise placed on, or worked into, any article." The Supreme Court of the United States have held that the object of this act was to extend the protection of a patent to the ingenious producer of new and original appearances given to manufactured articles, whereby their salable value was enhanced, and the demand for them enlarged. This appearance may be the result of the peculiarity of configuration or of ornament alone, or of both conjointly.

The Commissioner therefore held that in view of the fact that the subject matter of Parker's application was ornamental in character, and was to be incorporated into the structure of the article, to be a permanent part thereof, it came within the terms and meaning of the design act.

In *Hall vs. Atkinson*, the testimony showed that about the year 1840 Alexander Calhoun and David Atkinson were a firm engaged in the manufacture of plows; that they devised a plow which met with great favor among the agricultural districts of the South, and this plow soon became known as the "Calhoun" plow. Some time before 1858 Atkinson died, and his widow took his place as a member of the firm. In 1858 Calhoun died, and his place was supplied by John Calhoun. This firm continued to supply the market with the plows in question until about the breaking out of the war in 1861, since which time Mrs. Atkinson had not been engaged either in the manufacture or sale of plows; but the firm of which she was a member leased the right to manufacture these plows, and to use the brand of "Calhoun &