RECENT DECISIONS RELATING TO PATENTS, TRADE MARKS, ETC.

By the U. S. Circuit Court—Eastern District of Michigan.

PAVEMENT.—PHILLIPS *et al. vs.* THE CITY OF DETROIT.

1. The members of the Board of Public Works of Detroit are bound by an injunction against the city, of which they have notice, notwithstanding they are not parties to the suit nor the writ, and the same is not actually served upon them.

2. It is no excuse for the violation of a preliminary injunction in a patent case that the patent is invalid or the writ improvidently granted. If the court has jurisdiction to issue the writ it must be obeyed until it is dissolved.

3. The wooden pavement patented to Robert C. Phillips is infringed by the use of blocks cut from trees or saplings in their natural form, though a narrow segment is cut off from one side of each block.

4. Where a preliminary injunction in a patent case is violated the respondents will not be required to pay the patentee the amount of his royalty where they were acting in an official capacity, deriving no personal benefit from the infringement, especially if there be any reason to believe they acted in good faith.

By the U. S. Circuit Court.—District of Massachusetts.

SPINNING FRAME.—DRAPER *et al. vs.* WATTLES.

1. Nothing being claimed upon reissue (Reissue Patent No. 6,386, W. T. Carroll, April 20, 1875, spinning ring) but what could have been claimed in the original patent, the suggestion of "new matter" was not sustained.

2. The mere deposit of a model in the Patent Office gives rise to no inference that the application for patent was completed at such date.

3. Although the circumstances of the inventor and the nature of the article may have required that it be tested by others, still, under the defense of adverse public use, it is somewhat difficult for a court to qualify, by a supposed intention not declared at the time, the act of an inventor who sells the patented article on two occasions, apparently in the ordinary course of trade.

4. Section 7 of the patent act of March 3, 1839, as amendatory of that of July 4, 1836, construed to imply that the purchase, sale, or prior use of an invention, etc., in defeat of a patent, shall have been with knowledge and consent of the inventor.

5. But the sale, purchase, or use must have been of the thing patented. *Hence,* where it was a less perfect article, not merely a colorable variation, no dedication results, although such article may embody features in common with what was thereafter patented.

By the Commissioner of Patents.

EX PARTE SMITH.

1. The question whether a complete process, chemical or mechanical, can be subdivided in an application, and whether, when it is so subdivided, a claim for one of the subdivisions can be joined with a claim for the complete process, turns on the question whether such subdivisions constitute subprocesses, effecting themselves distinct results subsidiary to the general result of the entire process.

2. An applicant may join in one application a broad or generic claim for a method or process, and a specific claim for one of its forms or modifications; but he cannot unite such broad claim with specific claims for two or more of its modifications, nor can he unite in one application two such specific claims without the generic claim.

3. An applicant may join in one application a broad claim for a process of fixing colors, including, as elements, (1) painting the substance; (2) heating it; (3) subjecting it to the action of vapor; and (4) raising the temperature of the vapor during its application; and a claim for one specific form or modification of the process covered by the broad claim, including, for example, (1) painting the substance with corrosive colors; (2) heating it; (3) subjecting it to the action of vapor; and (4) raising the temperature of the vapor during its application.

4. Two claims, of which one does and the other does not show a gradual increase in the temperature of the vapor as an element of the process of fixing colors cannot sustain to each other the relation of process and sub-process, nor that of genus and species, and cannot coexist in one application.

NICHOLSON *vs.* BENNETT *et al.*

1. Interferences between patents cannot be adjudicated in the Patent Office; but interferences between one or more applications and two or more patents can be adjudicated in the Patent Office, and priority awarded to one of the patents or to an application according to the facts, and such adjudication is binding upon all parties so far as the interference in the Office is concerned, although not conclusive as to the relative rights of the parties outside of the Office, nor even in *ex parte* proceedings in the Office.

2. It is the fact and not the possibility of the claim of an invention by an applicant which legalizes the declaration of interference between his application and other applications or patents showing but not claiming the device.

3. Subjects of interference are things, not words; and the same words must mean the same things in their application to several devices in interference. The issue cannot have one meaning when applied to one and a different meaning when applied to the other.

4. The word "deflecting" is accurately applied to the two inclined planes which constitute the upper walls of the combustion chamber in Arbogast's patent No. 180,517, dated August 1, 1876; but it has not the same meaning when so applied which it has when applied to the upper walls of the combustion chamber in Nicholson's application, filed May 28, 1877, and in Arbogast's patent No. 183,328, dated March 13, 1877. On this point the application and patent of 1877 are not anticipated by the patent of 1876.

By the Acting Commissioner of Patents.

EX PARTE LIPPINCOTT.

1. The same requirements as to the division of an application apply to reissue as to original applications.

2. Giving to the words "revision" and "restriction," occurring in section 4,916 Revised Statutes, their ordinary signification, they cover all actions which the Patent Office is authorized to take in regard to any application for a patent, and therefore extend to the office the same control in all respects over reissue applications that it has over original ones.

3. A single composition needs but a single claim, and if an applicant regards a second claim necessary to protect him in the employment of added ingredients, such claim must be regarded as embracing another and a different article, and a division of the application required.

Correspondence.

Manufacture of Paper Collar Goods.

To the Editor of the Scientific American:

My attention having been called to an item in your paper of September 6, copied from the *Science News* (evidently an English paper), claiming arsenic had been found upon analyzing paper collars, I hasten to disabuse the public of such false representations of a nameless M.D.

This works probably prepares more than three-fourths of all the cloths used in the manufacture of paper collars in America, an amount which will probably exceed 6,000,000 running yards the present year, including all the cloths used by the Goldsmith and Hoffman Collar Co., the American Collar Co., and Jas. L. Libby, of New York; the Reversible Collar Co., of Boston; and Geo. W. Tapley, of Springfield, Mass.

We also do all the "combining"—uniting of cloth and paper—and finishing the united stock ready for cutting into collars and cuffs, for the Goldsmith and Hoffman Collar Co., of New York, and may, I think, be considered competent authority to testify concerning materials used in producing paper collar stock.

I therefore explicitly deny, in the most emphatic manner, that any salt of arsenic, lead, zinc, tin, or other poisonous or deleterious substance is used in the preparation of paper collar stock. The cloths are "stuffed" with a mixture of starch, clay, terra alba, and the most harmless salts of lime, magnesia, or barium, materials as harmless as so much beach sand either to the skin or in the stomach. When combined with paper they are "coated" with similar substances, held in place by fine glue, and with the addition of pure beeswax and French talc to take a high finish.

The public mind has been put in such a condition of alarm by the recent scrap book "developments" of an ignoramus concerning alleged adulterations of food that it is peculiarly sensitive, and a little item such as that in your paper, uncontradicted, may seriously injure a very important, legitimate, and carefully conducted industry.

Will you, therefore, kindly give prominence to this unequivocal denial of the entire facts quoted, by

Yours very truly,

SPENCER BORDEN, Agent,
Fall River Bleachery.

Fall River, Mass., Sept. 17, 1879.

[Our correspondent has entirely mistaken the meaning of the item complained of.

In our issue of March 1, notice was taken of a case of arsenical poisoning in Denver, Colorado, which was traced to arsenic used by the patient's laundress to give a polish to starched linen. The extract from the *Science News* says that the case had attracted attention in the English papers, leading to an examination of the paper collars and cuffs worn by a patient showing symptoms of arsenical poisoning. The doctor reported the presence of arsenic in the collars. There was no intimation however that the collars were of American make.

It may be proper to add that a recent official analysis in London of certain German collars, reported to contain arsenic, proved them to be entirely free from that or any other deleterious substance.]

Famine and Disease.

Reviewing the reports on the Madras famine submitted by Dr. Cornish, Sanitary Commissioner of that Presidency, the Commission has arrived at the following conclusions: First, that the same atmospheric conditions which produce scarcity of food produce also epidemic disease; secondly, that a large proportion of the mortality of a famine season is due more to epidemic disease than absolutely to want of food, although the destructiveness of an epidemic is increased by the fact that people half starving or ill fed are less able to withstand disease; thirdly, that a point in the process of chronic starvation, when nutriment no longer sustains life, is often reached before people can obtain or will seek relief at a distance from their homes.

The Sensible Warmth of the Air.

At the recent meeting of the British Association, Professor George Forbes gave an account of an instrument for determining the sensible warmth of the air. By the term "sensible warmth" is meant not the physical temperature which would be measured by an ordinary thermometer, but what might be called the physiological temperature or warmth of the skin as is estimated by nervous sensation. The sensation of heat and cold by the human subject does not depend entirely on the physical temperature of the air, but on that combined with its degree of humidity, and the rapidity with which evaporation is taking place from the surface of the body, which is influenced by both moisture in the air and the rapidity of its movement in the form of wind. It is well known that with the thermometer standing at zero (Fahr.), a person may stand in a still air without feeling as cold as he would feel if he were exposed to the wind with the thermometer at 30 degrees; the reason of this is that the amount of sensible warmth is determined by the degree of rapidity with which heat is transferred from the skin to the surrounding air.

In still air there are formed around the body layers of warm air which protect it from the chilling influence of the colder air beyond; when, however, the air is in motion these layers of warm air are removed as fast as they are formed, cold air supplying their place; the body, therefore, has a far greater demand upon it of heat than before, and a feeling of cold is the result. The thermometer is but a very poor indicator as to whether on a certain day extra clothing is advisable or not, and there can be little doubt that an instrument which, by being affected in a similar manner to the human body, can indicate the sensible warmth of the atmosphere must prove of great value not only in hospitals, and for invalids generally, but it must be valuable to the climatologist and horticulturist.

We illustrate the instrument devised by Professor Forbes, which is exceedingly simple. A is a cylindrical vessel of tin plate filled with boiling water, which can be kept hot for several hours by inclosing the vessel in a case thickly padded with felt or some very slow conductor of heat. Through a sort of stuffing box in the center of the top of this vessel slides a copper rod, C, which dips at its lower end into the hot water, and at its upper is attached to the brass socket, D, which incloses on all sides the bulb of a thermometer, B, the reading of which indicates the temperature of the metallic mass, D. Now the temperature of this mass is affected by two things; first, by the conduction of heat by the rod, C, from the water in the vessel, A, which is fairly constant; and, second, by the rapidity with which that portion of the copper rod, C, which is exposed to the air, parts with its heat to the atmosphere, and this may depend either upon the length of the rod, C, which is exposed between A and D, or upon external atmospheric conditions; but as it is these conditions which the instrument is intended to determine, the length of the rod exposed is made variable by being capable of sliding in and out of the heating vessel, A. In using the instrument, the vessel, A, is first filled with boiling water and inserted in its padded box, and the whole apparatus is placed in an exposed position, and the length of the rod, C, which is exposed to the cooling influences of the atmosphere, is so adjusted that the thermometer gives a constant reading, such, for instance, as "blood heat," *i.e.*, 98 degrees. When the thermometer has become stationary at this point, the length of rod exposed to the air is a measure of the sensible warmth of the air.