Syllabus.

TEXAS LAND AND CATTLE COMPANY *v.* SCOTT.

ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE WESTERN DISTRICT OF TEXAS.

No. 1471. Submitted November 3, 1890. — Decided November 10, 1890.

Motion papers should contain enough of the record to enable the court to act understandingly: but when they are deficient in that respect, the court may, if it pleases, examine the record.

THIS was a motion to dismiss or affirm. The case is stated in the opinion.

Mr. A. W. Houston for the motion.

PER CURIAM. Motion papers should contain in themselves so much of the record as to enable the court to act understandingly, and these are deficient in that regard. We have, however, examined the record, and the writ of error is dismissed upon the authority of *Richmond & Danville Railroad* v. *Thouron et al.*, 134 U. S. 45.

ROBERTSON *v.* OELSCHLAEGER.

OELSCHLAEGER *v.* ROBERTSON.

ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

Nos. 86, 255. Argued November 20, 1890. — Decided December 22, 1890.

Philosophical apparatus and instruments, as referred to in Schedule N of the tariff act of March 3, 1883, 22 Stat. c. 121, 513, are such as are more commonly used for the purpose of making observations and discoveries in nature, and experiments for developing and exhibiting natural forces, and the conditions under which they can be called into activity; while implements for mechanical or professional use in the arts are such as are more usually employed in the trades and professions for performing the operations incidental thereto.

Duties were assessed at 45 per cent *ad valorem* and collected on a variety of articles imported into New York, it being claimed that they were manufactures not specially enumerated under Schedule N of the act of March 3, 1883, 22 Stat. c. 121, 501. The importer brought suit to recover an alleged excess of duties, claiming that they should have been assessed at 35 per cent, under Schedule N, as philosophical apparatus and instruments. At the trial a scientific expert was examined as a witness. The court and jury, with the exception of this evidence, had nothing before them to rely upon except the common knowledge which all intelligent persons possess. As a result the court directed the jury (1) to render a verdict for the defendant as to a specified class of the articles: (2) to render a verdict for the plaintiff as to another specified class: and (3) as to the remainder, it left the jury to determine their classification, and they found for the plaintiff as to a part, and for the defendant as to a part. *Held*, that there was no error in these instructions.

This was an action against the collector of the port of New York to recover back duties alleged to have been illegally exacted. Upon the trial there was a verdict for the plaintiff as to a part of the sum demanded, and for the defendant as to the residue thereof, and judgment was entered on this verdict. Each party sued out a writ of error. The case is stated in the opinion.

Mr. Edwin B. Smith for Oelschlaeger. *Mr. Charles Curie* was with him on the brief. *Mr. Frank P. Prichard* also filed a brief for same.

Mr. Assistant Attorney General Maury for Robertson.

Mr. Justice Bradley delivered the opinion of the court.

This is an action brought to recover an alleged excess of duties charged for the importation of certain goods and chattels in the year 1884. The goods consisted of certain instruments used in the arts, or in laboratories, or for observation and experiment. The plaintiff, Oelschlaeger, who imported the articles, claimed that they were philosophical instruments and apparatus, and chargeable with a duty of only 35 per cent *ad valorem*, under Schedule N of the act of March 3d, 1883, clause following, to wit: "Philosophical apparatus and instruments, thirty-five per centum *ad valorem*." 22 Stat. 513, c.

121. The defendant, on the other hand, then collector at the port of New York, contended that the goods in question came under the head of the following clause, at the end of Schedule C, in the same act, to wit: "Manufactures, articles or wares, not specially enumerated or provided for in this act, composed wholly or in part of iron, steel, copper, lead, nickel, pewter, tin, zinc, gold, silver, platinum or any other metal, and whether partly or wholly manufactured, forty-five per centum *ad valorem*." 22 Stat. 501, c. 121.

The question is whether the court below, on the trial of the cause, committed any error in its rulings and instructions as to what implements were and what were not embraced in the category of philosophical apparatus and instruments. There is undoubtedly a clear distinction between mechanical implements and philosophical instruments or apparatus; and whatever belonged to the former class was properly chargeable with 45 per cent *ad valorem*, and whatever belonged to the latter class with only 35 per cent.

It is somewhat difficult in practice to draw the line of distinction between the two classes, inasmuch as many instruments, originally used only for the purpose of observation and experiment, have since come to be used, partially or wholly, as implements in the arts; and, on the other hand, many implements merely mechanical are constantly used as aids in carrying on observations and experiments of a philosophical character. The most that can be done, therefore, is to distinguish between those implements which are more especially used in making observations, experiments and discoveries, and those which are more especially used in the arts and professions. For example, an astronomical telescope, a compound microscope, a Rhumkorf coil, would be readily classed as philosophical instruments or apparatus, whilst the instruments commonly used by surgeons, physicians, surveyors and navigators, for the purpose of carrying on their several professions and callings, would be classed amongst mechanical implements, or instruments for practical use in the arts and professions. In short, philosophical apparatus and instruments are such as are more commonly used for the purpose of making observations

and discoveries in nature, and experiments for developing and exhibiting natural forces, and the conditions under which they can be called into activity; whilst implements for mechanical or professional use in the arts are such as are more usually employed in the trades and professions for performing the operations incidental thereto.

The different kinds of articles which were the subject of inquiry on the trial were over forty in number. A specimen of each kind was produced in evidence and marked as an exhibit, as follows, to wit:

Ex. 1. Large compound microscope.
Ex. 1½. Prepared slides for Ex. 1.
Ex. 2. Small microscope for examining textile fabrics.
Ex. 3. Jeweler's magnifying glass.
Ex. 4. Astronomical telescope on tripod.
Ex. 5. Single-barrelled telescope or marine glass.
Ex. 6. Double-barrelled field glass.
Ex. 7. Opera glass.
Ex. 8. Small telescope on tripod.
Ex. 9. Magnifying glass with handle.
Ex. 10. Plano-convex lens, unmounted.
Ex. 11. Reflecting mirror used in old telescopes.
Ex. 12. Ophthalmoscope.
Ex. 13. Combination of magnifying glass and stereoscope.
Ex. 14. Oculist's outfit.
Ex. 15. Stereopticon, or magic lantern.
Ex. 16. Slides prepared for Ex. 15.
Ex. 17. Dentist's speculum.
Ex. 18. Grenet battery.
Ex. 19. Pocket battery for physician.
Ex. 20. Inductive Rhumkorf coil.
Ex. 21. Galvanometer.
Ex. 22. Geissler tube.
Ex. 23. [Not put in evidence.]
Ex. 24. Anemometer.
Ex. 25. Hygrometer.
Ex. 26. Hygrometer.

Ex. 27. Thermometer.
Ex. 28. Thermometer.
Ex. 29. Thermometer, minimum.
Ex. 30. Maximum and minimum thermometer.
Ex. 31. Thermometer (bric-a-brac).
Ex. 32. Dairy thermometer and hydrometer.
Ex. 33. Laboratory thermometer.
Ex. 34. Clinical thermometer.
Ex. 35. Clinical thermometer.
Ex. 36. Pocket thermometer.
Ex. 37. Barometer.
Ex. 38. Barometer.
Ex. 39. Barometer.
Ex. 40. Hydrometer, for general purposes.
Ex. 41. Alcoholometer.
Ex. 42. Urinometer.
Ex. 43. Radiometer.
Ex. 44. Spectacle lenses.

A gentleman of scientific attainments was examined as a witness for the purpose of explaining the specific uses to which these various instruments are respectively applied; and his evidence was all that the court or jury had before them on which to base a decision, except that common knowledge which all intelligent persons possess, and of which the judge who tried the cause may in some instances have taken judicial notice. As the result of the inquiry the judge directed the jury to render a verdict for the defendant as to the articles designated as Exhibits 2, 3, 10, 12, 14, 17, 19, 27, 28, 29, 31, 32, 34, 35, 36, 41, 42, 44, which he held not to be philosophical apparatus or instruments; and a verdict for the plaintiff as to those designated as Exhibits 1, 1½, 4, 11, 15, 16, 18, 20, 21, 22, 24, 25, 26, 30, 33, 37, 38, 39, 40, 43, which he held to be philosophical apparatus or instruments. As to six of the articles, represented by Exhibits 5, 6, 7, 8, 9, 13, he refused to direct a verdict, and left the question of their classification to the jury, who found for the plaintiff as to Exhibits 5, 6, 8, and for the defendant as to Exhibits 7, 9, 13.

Opinion of the Court.

With regard to the last six items, which were left for decision with the jury, under the charge of the judge (which is not excepted to), we do not think that the judge erred in thus disposing of them. Each party requested him to direct a verdict in his favor. We think he was justified in refusing these requests. As before remarked, it is difficult to draw the line distinctly, and the classification of the articles referred to, according to the preponderance of use to which they are applied, depended upon a fair consideration of the evidence, which was rightly referred to the jury. No. 5 was a telescope, known as a field glass, which the witness said was not constructed specially for astronomical purposes, though it could be used for some of the stars; that it was used to gratify a laudable curiosity; a great deal by seamen. No. 6 was testified to be of the same general character, though smaller, and sometimes carried in a pouch. No. 8, the witness said, was a magnifying glass, having a lens called the Coddington lens, commonly used for examining grain and minerals and things of that sort, and by botanists and entomologists; that he, as a chemist and scientist, had had occasion to use it. The judge, on this evidence, might well hesitate to speak *ex cathedra* on the character of these instruments; and we cannot say that the jury did wrong in classifying them as philosophical instruments. The same thing may be said with regard to Exhibits 7, 9 and 13, which the jury found not to be such instruments. No. 7 was an opera glass; No. 9, a common magnifying glass with a handle, used for examining anything which was desired to be magnified, — fine print, handwriting, pictures, anything. No. 13 was a magnifying glass and stereoscope, for examining photographs, or stereoscopic views, such as are often found on parlor tables.

We also think that the judge committed no error as to the character and classification of the other instruments, respecting which he directed the jury what verdict to render. It is unnecessary to review the evidence in detail with regard to each instrument. Suffice it to say, that whilst there might be some ground for question with regard to particular cases, yet on the whole we think that the proper principle was followed,

and that no injustice was done to either party. To illustrate our views we may take one or two instruments by way of example. Thus, as to Exhibit 12, the witness testified as follows:

"Exhibit No. 12 is an ophthalmoscope. It is a practical instrument used by oculists for examining the interior of the eye and other parts of the body. The principle on which it works is as follows: The light is reflected from a burner in front of the examiner, who holds this object to his eye, into the eye of the patient without penetrating the observer's eye, as there is only a very small hole through which it can enter; and in that way protects the observer's eye from the direct rays of the light. It is peculiarly adapted for physicians' and oculists' use. It may have other uses, but the witness is not acquainted with them. It is used in their profession for the purpose of enabling them to get at the facts by which to treat either the throat or eye, as the case may be, practically."

It is clear from this evidence, that this instrument is intended for practical use in the profession of an oculist. It is an implement, a tool, not used for the discovery or contemplation of natural objects for the purpose of attaining or communicating general instruction; but as an implement for carrying on a profession or an art.

Again, take Exhibit No. 20. The witness describes its use as follows:

"Exhibit No. 20 is a Rhumkorf coil. This coil is constructed on the following principle: Around a central core of soft iron is wound a certain number of turns of copper wire, each turn being insulated by a layer of paper or some other insulating material; then on top of this coarser wire is wound in the same direction a large number of layers of very thin wire, each one likewise insulated by a layer of paper or other insulating material, and the fine wires connect with the two poles on top and the coarser wires connect with the lower, with the commutator running from one pole to the other. This box is filled with what is called condenser. The condenser is a series or number of plates of tin foil such as we find wound around tobacco. That stores up electricity somewhat on the principle

of a Leyden jar, and keeps it stored, so that when a person uses it he gets a much greater shock than he would if the condenser were not there. That is used in schools and universities, and also by physicians, and by people who merely use it for their own amusement. It is used practically in colleges and universities to illustrate electrical science, and also by every one who has occasion to generate that kind of electricity. It is also used to explode mines at times, to explode dynamite cartridges, or anything of that kind. It may be used in connection with a battery. It has no practical use in telegraphing. Its main use is for illustrating the laws of electrical induction."

It is plain from this description that the Rhumkorf coil is much more used in the lecture room, and for the purpose of scientific discovery, than for practical use in any art or profession.

Considerable argument is employed by the counsel for both parties to show that the judge was mistaken, on the one side or the other, in his various directions; but it would prolong this opinion to an unreasonable extent to examine all these discussions. We can only refer to one or two, and dispose of the rest in a general way.

The counsel for the government contends, amongst other things, that the judge erroneously classified Exhibit 15, (which was a stereopticon or magic lantern,) as a philosophical instrument. He says: "The stereopticon or magic lantern does not appear to be of much scientific use, and we doubt if one is ever purchased to be used for a purely philosophical purpose. But the instrument is mostly used in giving entertainment by throwing magnified pictures or representations on a screen, or for displaying advertisements from elevated points in the streets of cities, and is hardly 'philosophical' or 'scientific.'"

On the other hand, the witness, after describing the construction of the instrument, says: "This instrument is used for illustrating lectures and instruction in colleges and universities, and for projecting pictures of different subjects upon a wall. It is used in the illustration of natural science."

We think that in this instance the judge committed no error in taking the view plainly suggested by the witness, instead of judicially relying on his own knowledge and experience.

In like manner the counsel for the plaintiff strenuously contends that the judge was wrong in not deciding that the *minimum thermometer* (Exhibit 29) is a philosophical instrument. The witness says it is filled with alcohol, and is used for measuring very low temperatures — temperatures below the freezing point of mercury. It can be used where the mercury thermometer cannot be used. He adds: "It is a scientific instrument, used for scientific purposes." It is, however, in the same class with other thermometers, which the judge, as we think correctly, regards as instruments for daily use in the arts and in common life, and not specially philosophical instruments.

But Exhibit No. 30, the *maximum and minimum thermometer*, which is used for recording temperatures, one side for the day time and the other during the night, is of a different character, and, if not entirely, is more particularly used to ascertain the exact momentary variations of the temperature of the atmosphere for the entire period of twenty-four hours. It is very properly classed among philosophical instruments.

But it is unnecessary to pursue the examination. The general principle of classification adopted by the judge at the trial was correct, and we see no misapplication of it which should induce us to reverse the judgment.

Judgment affirmed.