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### THE ESSENCE OF CONTRABAND.

Among all the shifting enumerations of articles of contraband which we find in treaties and authors of the formative period of modern international law, it is not infrequent to hear it said that no certain common principle can be discovered. Some things, manifestly warlike, are included; but then some things, manifestly unwarlike, are included too; and, apparently, capriciously and arbitrarily.

Some have rushed to the conclusion that anything may be contraband that can help the enemy. Others have maintained that the inclusion of innocent articles was a mistake and an illegality. Others have concluded that, whilst the general conception of contraband was a very restricted one, it did admit of a certain elasticity within narrow limits.

The last view is that which the present writer put forward in a necessarily short and imperfect sketch of the subject recently published.<sup>1</sup> It seems desirable here to indicate what is the spring of the elasticity referred to. It is this: that the true essence of the conception of contraband is that the article shall have a warlike connotation—shall be intimately bound up with the idea of war. This is obviously a conception which will be interpreted

<sup>1</sup> War: Its Conduct and Legal Results, Baty & Morgan, 1914, p. 370.

by different persons in somewhat different ways; and thus it is that we find the occasional inclusion in the category of horses, money and naval stores. The question of provisions is not considered because it is only *qua* naval stores that they have regularly been treated as contraband. The sweeping interdictions of provisions proclaimed by France and Great Britain in 1793 were avowedly based on entirely special circumstances, such as the alleged fact that the French Government was not a normal member of the family of nations, and that famine was a lawful weapon against nations as much as against besieged cities.

The inclusion of money, inexplicable on any other ground, is explained by this principle that contraband is that which connotes war. No commoner phrase is current than that which couples war and money, declaring that money is "the sinews of war". In an age of elementary political economy, money was not only highly useful in war, but the idea of bullion and specie, treasure, was bound up with the idea of war. But no one says, "Cotton is the sinews of war", or, "Copper is the sinews of war".

Why, again, were the horse, and masts and sails and pitch for the ship, contraband,<sup>2</sup> whilst lead and iron were not? Surely the former had as important civil uses. Perhaps they had; but they had not the sentimental connotation of the horse and the ship with war. In the old days when cavalry still retained its character of the queen of battles, horses naturally suggested thoughts of war, despite their civil uses. With the introduction of gunpowder and artillery, "villainous saltpetre" and infernal sulphur had the same military connotation; and, despite their unmanufactured state, were treated as contraband. In peace, the ship, the horse, sulphur and saltpetre, were alike surrounded with a warlike aura. But who can say the same of copper or cotton? It may come to be said in the future, but the future is irrelevant to the present discussion.

Pitch and tar, in a naval war, were invested with the same military connotation. It is not because they were useful or in-

<sup>2</sup> One or two instances of their inclusion by conventional stipulation can be found. That does not affect the principle.

dispensable for the equipment of navies, but because they smelt of naval conflict, that they were treated as contraband. Every ship was a potential privateer; every ship was a ship of force; every seaman a potential man-of-warsman. So strongly was this felt, that an innocent merchant seaman was a fair prisoner of war. So strongly was it felt, that the British Nation, which spurned conscription, admitted (and admits) in the case of seamen, the press gang. Ships, even in peace-time, were bound to accept Admiralty control. Ships, even in peace, suggested warships. Tar and pitch at once suggested ships. Who said "tar", said naval combat.

This was the very extreme of the conception of contraband. When horses and ships were treated as contraband it was because the horse and the ship had a real military character. To appreciate the point of view of the old days, we must throw ourselves into their *milieu*. Saturated with the classics and the Old Testament, the people of the Renaissance looked on the horse as the very emblem and symbol of war. The cavalier, *chevalier*, was the typical warrior. Penetrated by the knowledge that the ship was ever armed, and ever ready to defend herself against the wrecker, the pirate and the Algerine, they were conscious of a warlike connotation in the ship, and the things that had a predominating maritime flavour.

Those days have passed. Cavalry is no longer the queen of battles, but artillery. The horse and the ship no longer suggest to us the combat. But will anyone pretend that copper and cotton do, apart from factitious agitation?

On the other hand, drums, which do not help an army very much, are stamped with the idea of war, and consequently are contraband. It is not their usefulness in war, but their special appropriateness for war, that makes things such.

The point so often insisted on, that raw material can never be contraband, really rests on the same great principle, that the essence of contraband is warlike connotation. For an unspecialized raw material can seldom have a specialized flavour of war. Yet it can have it. Sulphur, saltpetre, horses had it, whilst lead, iron, charcoal, carts, all equally indispensable, never had.

The school of Hautefeuille and Ortolan, which demands that raw material must always be exempt, triumphed in the framing of the Declaration of London in 1909. And indeed, at the present day, it is difficult to find any raw material which has a definite military flavour, unless it be certain rare materials used in making explosives. But, in principle, the exclusion of raw material from the category of contraband is only a particular case of the exclusion of articles possessing in themselves no military connotation. It is, however, such a luminous principle, and affords such a safe and certain guide, that it might well be accepted as a distinct rule of International Law, if indeed it has not already become such.<sup>3</sup>

The principle also clearly explains why the parts of military weapons are contraband, whilst the raw material of them is not. The former can be put together, the latter can be worked up. Why should they not be treated alike? Not, as Kleen thinks,<sup>4</sup> because the result of the process is a *different* thing in the latter case and the *same* thing in the former, but because the component parts are stamped with a military character, and the raw material is not.

It may of course be urged that the rule of military connotation is dangerously lax; and that it would assist a belligerent to assume to treat as contraband anything which he so desired. That is true; but it is a very much safer and more certain rule than the modern rule of subjective destination to military use, which belligerents for the last half century have been endeavoring to set up. It needs no invocation of conflicting evidence; it involves no holding-up of vessels whilst a case is got up against their cargoes. It is a matter of general judicial knowledge which a Prize Judge ought to decide in the high exercise of his great function. His government ought not to attempt to instruct him; for it is a matter on which they have no title to speak. Is, or is not, a given material such as would raise in the mind of an indifferent person the image of war? That is not a

<sup>3</sup> Kleen: *Contrabande de Guerre*, p. 151. (Paris, 1893.)

<sup>4</sup> *Ibid.*, p. 152.

question which can be determined by governments. It does not depend on the occult matters of policy or diplomacy to which Stowell alluded in *The Fox*<sup>5</sup> as proper subjects for governmental guidance to the Judge. It is the plainest question of common knowledge, for it is a question of the common understanding.

The advantage of the conception is that it entirely removes from the category of contraband things which are merely indispensable to, or useful to, the enemy in his campaign. The question is put on a general basis, and is simply: Has the article a military flavour? The further question, of whether this aroma can arise in the particular circumstances of the shipment (accidental contraband) is doubtless to be answered in the negative. Stowell's detection of it when innocent goods were going straight to a port of equipment opens a wide door, which has been pushed back of late so as to lead to results which would have greatly astonished him. In *The Imina*,<sup>6</sup> he allowed contraband to go to port which he held in *The Jonge Pieter*<sup>7</sup> to be too suspiciously near Holland for British merchants to trade at. In *The Stert*<sup>8</sup> and *The Luna*<sup>9</sup> he refused to extend a blockade to neutral ports although it was alleged that the result would be to render the blockades illusory. In *The Frau Margaretha*<sup>10</sup> he allowed articles to go to Quimper, which he would not have permitted to go to Brest, forty miles away. The authority of Stowell cannot be invoked for any wide interference with the trade of neutral ports; the military aroma only arises when the goods are very specially and directly connected with military places.

We must infer, at the very least, that the occasion which converts innocent goods into contraband must be at least equally strong with the circumstance of the carrier trying to enter a port of enemy equipment. Their consignment *ex facie* to an enemy government, or to its exclusive agent, seems the only circum-

<sup>5</sup> (1811) Edw. Adm. 320.

<sup>6</sup> (1800) 3 C. Rob. Adm. 167.

<sup>7</sup> (1801) 4 C. Rob. Adm. 79.

<sup>8</sup> (1801) *Ib.* 66.

<sup>9</sup> (1810) Edw. Adm. 690.

<sup>10</sup> (1805) 6 C. Rob. Adm. 92.

stance which can carry the same weight. One is driven to the conclusion that the real remedy for the present difficulties is the abandonment of the sanctity with which the Declaration of Paris has somehow become invested. So long as the enemy's goods can traverse the seas in safety, provided they are not contraband, so long will the temptation to enlarge the category of contraband be irresistible.

And it must be remembered that since the Declaration of London, the neutral carrier of contraband, however innocent the cargo seems, loses his ship. The neutral carrier of enemy goods was not only safe, but received his full freight.

The instinct of the United States, in declining to accede to the Paris Agreement, was based on a sound intuition. The humanitarian provisions of that instrument came before their time. It could lead to no good purpose to enact a complaisance for which the world was not ready. Belligerents have broken out of its meshes by revolutionizing the conception of contraband, and the last state of the neutral, if their ideas are adopted, will be worse than the first.

The writer is not concerned to inquire whether the inclusion of money, ships, sails, tar, and horses in the denomination of contraband was right or wrong. In his opinion it was wrong. But the point is, that the ground of their inclusion was not that they were useful, or indispensable, to the enemy, but that they had in themselves an intimate and special, if sometimes a sentimental, connection with warlike operations.

*T. Baty.*

*London.*

## EXPERTS IN PATENT CAUSES.

Experts in patent causes have been the subject of criticism and witticism time out of mind. Courts, litigants, and attorneys have inveighed against them. The evil goes on. From the Selden Automobile Case<sup>1</sup> with its thirty-six large octavo volumes of proofs, mostly the work of experts, down to a case before the writer in which nearly one-half of a thousand-page record is the testimony of experts, there is abatement of this misdirected zeal only where the more stringent court rules are enforced. It is not the purpose of this article to dissect this tumor of the law merely to show its malignity, but rather to endeavor to point out a general remedy.

Up to the time of the new Equity Rules,<sup>2</sup> it was the practice to take expert proofs by deposition before notaries who, of course, had no power to rule upon the evidence. Rule 48 of the Supreme Court changes this practice as follows:

In a case involving the validity or scope of a patent or trademark, the district court may, upon petition, order that the testimony in chief of expert witnesses, whose testimony is directed to matters of opinion, be set forth in affidavits and filed as follows: Those of the plaintiff within forty days after the cause is at issue; those of the defendant within twenty days after plaintiff's time has expired; and rebutting affidavits within fifteen days after the expiration of the time for filing original affidavits. Should the opposite party desire the production of any affiant for cross-examination, the court or judge shall, on motion, direct that said cross-examination and any re-examination take place before the court upon the trial, and unless the affiant is produced and submits to cross-examination in compliance with such direction, his affidavit shall not be used as evidence in the cause.

Without doubt the operation of this rule has been and will be to reduce the *volume* of expert testimony to some extent in two ways: (1) the direct evidence of the expert, put in the form of an affidavit, is more concise than in the old question-and-

<sup>1</sup> Columbia Motor Car Co. v. Duerr, 184 Fed. 893 (1911), revising 172 Fed. 923 (1909).

<sup>2</sup> Promulgated by the Supreme Court, November 4, 1912.

answer form; (2) upon cross-examination in open court the judge may rule upon and materially shorten such examinations. But, on the other hand, two things are to be taken into account: (1) that there is no limit to the range of such expert affidavits; (2) that the court must waste much time in hearing the cross-examination, and in the end must read the entire proofs, and thus be involved in a two-fold expenditure of time.

Is there, then, no general remedy for this confessed evil in patent practice? The writer ventures the assertion that there is, that it is a most simple remedy residing with the Supreme Court, and therefore requiring no statutory enactment.

It is true that, recently, in some circuits, rules have been made stringently limiting the province of the expert in patent causes. This is but putting in rule form the opinion-criticisms of the courts for many years. But the difficulty with both circuit rule and case law is that they are critical in content rather than constructive in purpose; that they are not uniformly (and perhaps not always wisely) restrictive; and consequently that they tend toward variance in practice in the different circuits. To add to the chaos of state court practice nine different rules in the nine federal circuits would be monstrous when such course is wholly unnecessary.

Before we turn to the rulings of the appellate courts to discover what has been found to be the province of the patent expert, it may be instructive to revert briefly to the main causes or motives which have produced these evils. They divide fairly evenly between expert, counsel, and court.

The expert sees the case at close range and in detail. He is, in large measure, unable to gain the perspective to judge between essentials and non-essentials. As a rule, he is not familiar with the rules of evidence; and even if he is so familiar, the paramount consideration with him is the art which he knows in all detail and all of which he is anxious to disclose. Nor is it to be overlooked that there are, unfortunately, many patent experts who regard their province as practically that of special counsel, and far exceed their rights. This has been recognized



and condemned by the courts.<sup>3</sup> Counsel, in their anxiety to leave no point uncovered, readily follow the lead of the expert, rather than direct his activity; and upon cross-examination it is the tendency of counsel to endeavor to break down or weaken the direct statements—generally resulting in strengthening the expert's position, and inevitably resulting in padding the record. The court, in its tendency to give both sides all opportunity, is generally over-indulgent, and permits, especially upon cross-examination, a latitude which helps no one, but rather obscures the issue and burdens court, counsel, and parties alike.

An examination of the appellate rulings as to the province of the expert, while many are negative and critical in character, give distinct boundaries. These may be stated: 1. He may qualify himself to testify;<sup>4</sup> 2. He may explain the patent in suit;<sup>5</sup> 3. He may explain the prior art.<sup>6</sup> Such evidence is necessary when the prior art is complicated,<sup>7</sup> but *only* when the prior art is technical or complex;<sup>8</sup> 4. His testimony is never conclusive.<sup>9</sup>

The expert should, therefore, be limited upon both direct and cross-examination by the first three of these rules; and the fourth rule should establish absolutely a bar to the most common practice, namely, drawing conclusions of law as to infringement or anticipation.

As a matter of fact, though the patent expert rarely states conclusions of law as to novelty, infringement, *etc.*, in bald form, he devotes the greater part of his time to discussions which can have no other object than to conclude the law. And in order to reach such conclusions by round-about argumentation, he neces-

<sup>3</sup> *Osgood Dredge Co. v. Metropolitan Dredging Co.*, 75 Fed. 670; 21 C. C. A. 491 (1896); *Ideal Stopper Co. v. Crown Cork and Seal Co.*, 131 Fed. 244; 65 C. C. A. 436 (1904).

<sup>4</sup> *Corning v. Burden*, 15 How. 252; 14 L. Ed. 683 (1853).

<sup>5</sup> *Winans v. New York & Erie R. R. Co.*, 21 How. 88; 16 L. Ed. 68 (1858); *Loom Co. v. Higgins*, 105 U. S. 580, 586; 26 L. Ed. 1177 (1881).

<sup>6</sup> *Winans v. New York & Erie R. R. Co.*, *supra*, n. 5.

<sup>7</sup> *Waterman v. Shipman*, 55 Fed. 982; 5 C. C. A. 371 (1893).

<sup>8</sup> *Krupp v. Midvale Steel Co.*, 191 Fed. 588; 112 C. C. A. 194 (1911).

<sup>9</sup> *Am. Delinter Co. v. American Machinery Co.*, 128 Fed. 709; 63 C. C. A. 307 (1904).

sarily engages in much that is anything but straightforward statement of fact.

Even in seemingly complicated cases involving problems on the margin of known science, the actual issue, brought down to its last analysis of patentability or infringement, is in but few cases, complex. What is complicated is the voluminous and largely inconsequential evidence; and this is particularly the case where the subject-matter is some organic composition, or some chemical reaction or physical action beyond actual knowledge. And to spend days in discussion of chemical or physical theory to prove that the thing cannot be proved leads nowhere and lands at the same place. To make this point more specific, taken certain questions, for example, of hydrocarbon conversion. By no known method can a chemist tell to the last unit exactly what the component parts of certain hydrocarbons are. To start with, he is dealing with a product of nature which he cannot analyze; and when he puts it through a process of conversion he has a product which he cannot reduce absolutely to known parts or proportions. By a long disquisition in chemistry and physics, what has the expert done to enable the court to answer the three questions he must ask and answer before he can decide the case? These questions are: 1. What is the claimed feature of the plaintiff's patent? 2. Does the defendant use such claimed feature? 3. Is such claimed feature novel?

The court is not concerned with the scientific problems beyond enablement to answer these three questions. It is well known that the scientific fact or theory cuts no figure except as a side-light; for a patentee is not charged with such scientific knowledge.<sup>10</sup> All the patentee has to do is to show how to produce the desired result, and this he does by a plain statement of the steps or combinations he employs. These can be stated in a one-two-three order. Then the question is whether the defendant has employed the same steps or combination, or their fair equivalent; and this is, or should be, a one-two-three propo-

<sup>10</sup> *Eames v. Andrews*, 122 U. S. 40; 30 L. Ed. 1084 (1887); *Emerson v. Nimocks*, 99 Fed. 737; 40 C. C. A. 87 (1900).

sition. The third question is, are these steps or combinations found in the prior art? Either they are or they are not, and the determination of whether the prior art shows such steps or combinations does not require hundreds of pages of testimony, but is rather a comparison of elements, steps, or combinations, and identity or diversity of result.<sup>11</sup>

To illustrate the above, let us take the claim of the Selden Automobile Patent which, as already stated, took thirty-six large volumes of printed evidence to elucidate for the court. This claim reads:

1. The combination with a road locomotive, provided with suitable running gear, including a propelling wheel and steering mechanism, of a liquid hydrocarbon gas-engine of the compression type, comprising one or more cylinders, a suitable liquid fuel receptacle, a power shaft connected with and arranged to run faster than the propelling wheel, an intermediate clutch or disconnecting device and a suitable carriage body adapted to the conveyance of persons or goods, substantially as described.

If, now, we make a broad analysis of this claim by the one-two-three method we have: 1. Running gear; 2. Gas engine of the compression type; 3. Fuel receptacle; 4. Power shaft; 5. Clutch; 6. Carriage body. These are the main elements. They might be, of course, qualified and refined, but they are sufficient for our purposes of illustration.

Compare these elements with the combination used by the defendants, and we find: 1. Running gear? Yes. 2. Gas engine of the compression type? Selden used the old Brayton engine; defendants used an engine of the Otto type. Here was the crux of the case. 3. Fuel receptacle? Yes. 4. Power shaft? Yes. 5. Clutch? Yes. 6. Carriage body? Yes. Hence the *one* question was whether the old Brayton engine was inclusive of the later Otto engine—the high-compression engine which made the automobile a practical, operative machine.

The question in its last analysis was a question of law for the court. An expert could do no more than show what the

<sup>11</sup>Electric Signal Co. v. Hall Signal Co., 114 U. S. 87; 29 L. Ed. 96 (1885).

earlier engine was and its capabilities, and show what the later engine was and how it extended those capabilities.

Had the expert evidence been strictly limited to those propositions, there never could have been such a mass of evidence; and it is an open question whether this befogging of the issue was not the cause of the wholly different views of the trial and appellate courts.<sup>12</sup>

While there are cases wherein so simple and straightforward analysis is not possible, they are the exceptions; and even in such cases there is no reason why the method and procedure pointed out should not be applied.

Hence, the remedy: Since the Supreme Court has, in part, regulated the taking of expert testimony in patent causes by the equity rule above quoted, it might well add a single paragraph embodying the appellate rulings stated, and thus at once largely remedy the evil and make the practice uniform throughout the nine circuits.

While the phrasing of such an addition to Equity Rule 48 is for the master-mind that wrote those rules—a feat probably unequalled in the history of legislation or decision—there is no doubt that such a rule could be drawn within the four corners of fixed law which, in conclusion, may be summarized as follows: The province of the expert in patent causes is, 1, to qualify himself to testify; 2, to explain the patent in suit; 3, to explain the prior art when recondite or complex; 4, never to draw conclusions of law.

*William Macomber.*

*Buffalo.*

<sup>12</sup> 172 Fed. 923 (1909) and 184 Fed. 893; 107 C. C. A. 215 (1911), *supra*, n. 1.