

Ex Book No 4 of 1931

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J. Fielding Boyle  
v  
Rainsford

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Reasons  
for judgment

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Mr Justice Clarke

(Delivered at Sydney on  
31.7.1931).



JUDGMENT

STARKE J.

Two petitions have been presented by J. Fielding and Co Ltd, with the authority of the Attorney General, praying respectively for the revocation of Letters Patent No. 23801 of 1925 and No. 5116 of 1926, granted to Clarence Ferdinand Rainsford. During the hearing, the attack upon Letters Patent No. 23801 was confined to Claims Nos. 1-14, both inclusive, and Claim 23, and that upon Letters Patent No. 5116 to Claims 1 to 8, both inclusive.

One of the conditions of a grant is that Letters Patent are void if the invention is not a new invention (See Patents Act 1903-21, First Schedule). And, under English law, if a patent were granted for two or more inventions when one was not new, the patent was void, because the consideration for the grant was the novelty of all, and, the consideration failing, the Crown was deceived in its grant. (Morgan and anor v. Seaward and ors 2 M. and W. 544, 1 W. P.C. 187). A patent now is granted for one invention only, "but may contain more than one claim, but it shall not be competent "in an action or other proceeding to take any objection to a patent on the "ground that it comprises more than one invention". (Patents Act SS 33, 65, English Patents Act 1907 S 14(2)). But I apprehend that under the English law if a patentee lays claim to something that is not new, the Letters Patent are void, because, as before, the consideration for the grant is the novelty of all that is claimed, and, the consideration failing, the Crown is deceived. (Wilson etc Ltd v. Wilson Ltd 20 R.P.C. at p 19, Marchland v. Nicholson 10 R.P.C. 417, Deeley v. Perkes 1896 A.C. 496).

The Commonwealth Patents Act, Sec. 61, however, provides:

"Where the complete specification contains two or more claims in respect of the invention the invalidity of any one claim shall not affect the validity of any other claim or the validity of the patent so far as it relates to any valid claim".

The Section is placed under Part IV, "Procedure", Division 2 "Opposition" - which suggests that the Section is confined in operation to the procedural steps leading up to the granting of a patent, and therefore affords no protection in infringement or revocation proceedings. But the final words - "or the validity of the patent so far as it relates to any valid claim" satisfy me that the protection of the Section operates after the grant of Letters Patent, and must, therefore, extend to infringement or revocation proceedings. This final phrase of Section 61 may be compared with the words occurring in Section 60: "or affect the validity of the patent

when granted". Moreover, "Revocations of Patents" forms Division 7 of Part IV "Procedure".

Can Letters Patent, then, be revoked, which contain some claims that are invalid, and some that are valid, or are not attacked? "Letters Patent" is the name given to the document conferring a monopoly of trade or manufacture upon the subject. The revocation of a patent involves not only the cancellation of this document, but also the annulment of the rights thereby granted. (Cf Bynner v. The Queen 9 Q.B. 523, R. v. E. Archipelago Co 4 de G. M. and G. 199) . The effect of Sec. 61 is that the Letters Patent may be valid as to one or more claims, but invalid as to others. The provision has some analogy in the American law (See Walker on Patents 5th ed p 226 par. 177, p 279 pars 210 et seq) . The office of a claim is "to define and limit with precision what it is that is claimed to have been invented", and hence the various claims particularise the invention - they form distinct entities of invention. Therefore I see no reason since the enactment of Sec. 61, why a patent should not be revoked as to claims that are bad and allowed to stand as to claims that are good or are not attacked. The Letters Patent - the document - cannot in such a case be cancelled or destroyed, but various rights and privileges granted thereby may be annulled and vacated by judgment in revocation proceedings. This brings me to the consideration of the Letters Patent themselves.

Those numbered 23801 of 1925 were granted for improvements in and relating to the fastening or closing of cardboard and like cartons or packages, and those numbered 5116 of 1926 were granted for improvements relating to the jointing of cardboard or like boxes or packages.

In the complete Specification of Letters Patent No 23801, the patentee states that the invention relates to folding boxes or cartons of cardboard or other like material, and refers more particularly to such articles of the type in which the longitudinal meeting edges of the box blank are united to form an open ended rectangular structure which is adapted to be folded into a flat state by collapsing at the longitudinal corners or angles, the ends of the box being closed when in use by oppositely disposed flaps. Prior to the invention claimed, cardboard boxes of this description were in common use. They were often constructed of two outer sheets of cardboard or the like material, with a corrugated sheet between them, the three layers or sections being gummed or glued together. The ends of these sheets,

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or box blank, as it is called in the Specification, were fastened in various ways and at various points: some by adhesive tapes or strips of material, others by metal fasteners or staples - wire stitching, as it is sometimes referred to in the evidence. Adhesive material such as glue or gum was also commonly used as a fastener,<sup>both</sup> alone and in combination with the metal fasteners. The joint was generally made, I think, at the corners of the box, but it was quite common to overlap the ends, and to set back the joint in some degree towards the centre of the wall of the box. The contents of boxes so constructed were easily pilfered, and the patentee set himself to overcome this defect.

The main elements of the invention claimed by him and stated in his Specification are four:

1. Bridging the joints of the boxes with metal fasteners or staples.
2. Using metal fasteners or staples of a special type, that is fasteners with a flat body and a plurality of prongs or tongues which could be bent in opposite directions or towards each other.
3. Interengaging the joints by forming an open mouthed gullet made by removing<sup>E</sup> the corrugated material between the outer sheets of the cardboard or like material and inserting the opposite meeting edge of the sheet of cardboard or like material in the gullet.
4. Securing the closing flaps of cardboard boxes to the adjacent wall of the boxes by adhesive strips or cut away portions of adjacent walls.

By these means the patentee made, in my opinion, stouter and better boxes than those in common use,<sup>and</sup> whose contents would be less easily pilfered. The question for determination is the validity of his claims. But before consideration of the claims, it is desirable to state some propositions of law or of construction which are well settled.

- (1) The claims must be construed with reference to the whole Specification of which they form part.
- (2) The Specification must describe and claim an "invention". It may be great or small, difficult or simple, but some step forward must be taken that is not obvious, in view of the common knowledge of the art. Mere analagous user of old contrivances or old methods will not do, unless there is some ingenuity in the adaptation thereof.
- (3) "The art of combining two or more parts whether they be new or old or partly new and partly old, so as to obtain a new result, or a known result in

"a better cheaper or more expeditious manner, is valid subject matter  
"if it is presumable that invention in the sense of...skilful ingenuity  
"was necessary to make the combination" (Frost on Patents 4th ed Vol I  
Page 73).

(4) But if the invention consists in the combination of old contrivances  
and methods, then the Specification, or the claiming clauses, must make  
it clear that the invention resides in the combination and not in the  
separate parts or elements.

(5) Paper anticipations relied upon to invalidate a patent must "convey"  
"to men of science and employers of labour" the invention claimed by the  
patentee and enable them without exercise of inventive ingenuity to under-  
stand and apply it (King Brown and Co v. Anglo Brush Co 9 R.P.C. 313).

Claim 1 is as follows: .

"A cardboard or like box or carton of the type in which longitudinal  
meeting edge portions of the box blank are united to form an open ended  
structure which is adapted to be folded into a flat state by collapsing  
at the longitudinal corners or angles; characterised in that said longi-  
tudinal meeting edge portions of the box blank are united by fasteners  
which are arranged to bridge the joint and effectively prevent separa-  
tion of said meeting edges such joint being located at a point between  
the longitudinal corners or angles of the box so that said fasteners do  
not restrict the free folding of the box along said corners".

It is ~~as~~ a cardboard box that is claimed, but the novel element suggested  
is in locating the meeting edges of the box at a point towards the centre  
wall of the box and bridging the joint with fasteners. The claim does not  
specify the type of fastener, but, reading the Specification as a whole,  
I take "fasteners" to mean metal fasteners, and not strips of adhesive  
tape or the like material. But there is no invention in all this. Boxes  
were already in common use which were not joined at the corners but at  
a point between the corners or angles thereof and fastened at the joint  
with metal fasteners. And while the meeting edges of these boxes overlap-  
ped and the fastenings were not across the joints (See Exhibits 3 and 4),  
yet small boxes of the rigid and collapsible type were in common use with  
metal fasteners which were across the joints (See Exhibits 7 and 8). The  
patentee's claim is an obvious and plain adaptation of these well known  
practices. It is an adaptation "which an ordinary person skilled in the  
trade could have naturally made had he wished to". Claim 1 is bad.

Claim 2 is:

"In a cardboard or like box or carton a joint formed by abutting or inter-  
engaging the meeting edge portions to be united and inserting metal fas-

teners through said abutted or interchanged portions, said fasteners being arranged so as to extend transversely of and bridge said joint for the purpose specified".

Here, in a cardboard box, a joint is claimed formed by (a) abutting, or (b) interengaging, the meeting edges of the box and uniting them across the joint by metal fasteners. The type of metal fastener is not specified, but in the case of abutting edges the fastener must be across and bridge the joint, or the edges could not be fastened. In any case, the practice of bridging abutting joints was quite common in small cardboard boxes, and was a method that any competent workman in the trade would naturally have resorted to had he wished. The claim, so far as it concerns bridging abutting joints with metal fasteners, is too wide, and renders the whole claim bad. But the interengaged joint may as well be dealt with here.

An interengaged joint does not appear to have been used in Australia, prior to the patent, in connection with cardboard boxes. But tongue and groove joints in wooden boxes were quite common, with metal fasteners across the joint. And interengaged joints in book binding were common enough. Again, the abridgment of an American Specification (Exhibit 20) published in Australia before the date of the Letters Patent, discloses an interengaged joint for corrugated paper board. This description of paper ~~board~~ board was largely used in Australia and elsewhere for making cardboard boxes and cartons. The claim is wide enough to cover an interengaged joint of the kind described in the abridged American Specification. The means of fastening is not disclosed in that abridgment, but if a joint is interengaged, the means of fastening it by metal or other fasteners bridging the joint would be obvious to any person of ordinary skill in the trade. Consequently, in my opinion, the claim, in a cardboard box, to a joint formed by interengaging the meeting edges of the box to be united and fastened by metal fasteners bridging the joint, is anticipated by the American abridged specification. The claim is bad.

Claim 3:

"A structure in accordance with Claims 1 or 2 wherein one of said meeting edge portions is provided with an open mouthed gullet to receive the opposite meeting edge portion whereby an interengaged joint is formed for the purpose specified".

Claims referring back to and incorporating other claims - chain claims as they have been called - are most embarrassing, and should not, in my opinion, be allowed. (See Bancroft's Application 23 R.P.C. 89) . The

object of a claim is to give a perfectly clear statement of the invention claimed. But, as I understand this claim, it may be thus paraphrased: "A cardboard box with interengaged joints and bridged across with metal fasteners wherein one of the meeting edges is provided with an open mouthed gullet to receive the opposite meeting edge, whereby the interengaged joint is formed, and the edges are united by metal fasteners bridging the joint". The gullet is formed, I take it, by removing portion of the corrugated ~~sheet~~ sheet, and, so far as the claim goes, any method of removal will suffice. The only new step is making an open-mouthed gullet in one of the meeting edges of the box, so that the opposite edge might be inserted into it, and thus form the interengaged joint. According to the Specification, the side layers may be separated or opened out along one of the edges to be joined, and portion of the corrugated material removed to form the open mouthed gullet. But the claim is general, and is not limited to a gullet or opening formed by removal of corrugated material: it might be formed in the manner shown in the abridg-  
making of an  
ed American Specification. Claim 4 emphasises this view. Once the/open-  
ing in a corrugated board for the purpose of making an interengaged joint was disclosed, any person of ordinary skill and knowledge in the trade would perceive that the corrugated material might be removed, and the joint thus made in a practical manner. He might not hit upon the method which the patentee ultimately adopted, of ~~a~~ employing a rotary saw to remove the corrugated material so as to make the opening. But Claim 3 is not so limited, and it is bad in my opinion for want of invention, and has also, owing to its generality, been anticipated by the abridged American Specification.

Claim 4 is:

"A structure according to Claim 3 in which a corrugated intermediate layer or sheet of the material forming the box or carton is removed from between two side layers thereby forming said open mouthed gullet along one of the meeting edge portions to be joined substantially as and for the purpose specified".

This claim is also bad, and substantially for the same reasons given in respect of Claim 3.

Claim 5 is:

"A structure according to any of the foregoing claims wherein the meeting portions of opposite closing flaps at the end of the box or carton are joined together by fasteners which bridge the joint between said meeting portions of the end closing flaps substantially as described."

The new element in this claim is joining the closing flaps of cardboard boxes by fasteners (which I take to mean metal fasteners) bridging the

joint. This claim is also bad, and substantially for reasons already given.

Claims 6,7, and 8 are respectively as follows:

"6. A structure according to Claim 5 in combination with means for securing the side edges of said end closing flaps to an adjacent side wall of the box or carton for the purpose specified."

"7. A box or carton of the type indicated characterised in that the side edges of two opposite outer end closing flaps are secured by cutting away portion of an outer layer of the material forming an inner end closing flap and folding said cut away portion externally over said side edges of the outer flaps substantially as described with reference to Figure 7 of the accompanying drawings."

"8. A box or carton of the type indicated characterised in that the side edges of opposite outer end closing flaps are secured by adhering a strip of material to the outer surface of an inner end closing flap and folding said strip externally over said side edges of the outer flaps substantially as described with reference to Figure 8 of the accompanying drawings".

These claims relate to securing the closing flaps of cardboard boxes to the adjacent walls of the boxes by means of adhesive strips or cut away portions of adjacent walls. The new element in the box under Claim 6 is means for securing the edges of the closing flaps to the adjacent wall of the box, and any means will suffice. Adhesive strips had long been in use for closing the joints of cardboard boxes. There is no invention, and nothing novel, in directing that the sides and ends of a box may be secured. There is nothing novel in the new element, alone or in combination with any other elements involved in the claim. In Claim 7, the new element in the box is in cutting a strip off the side of a box and folding it over the edges of the closing flaps. The exercise of the inventive faculty is not called for in such a simple and obvious means of securing the flaps to the sides. I see no invention in the new element, either alone or in combination with any other elements involved in the claim. In Claim 8 the new element in the box is putting an adhesive strip of material round the edges of the closing flaps. Here again I see no invention in the new element, alone or in combination with the other elements involved in the claim. Claims 6,7, and 8 are bad.

Claims 9,10,11,12,13,14 are respectively as follows:

"9. A structure in accordance with any of the foregoing claims 1 to 5 characterised in that said meeting edge portions of the box or carton are united by sheet metal fasteners each of which has a plurality of integral fastening tongues at one or both ends thereof, said tongues being bent at right angles from an intermediate flat body portion which is adapted to bridge the respective joint for the purpose specified".

"10. A structure in accordance with Claim 9 wherein said tongues of the sheet metal fasteners are of square or non-pointed formation for the purpose specified."



"11. In cardboard or like boxes or cartons the use of metal fasteners constructed substantially as described with reference to Figures 9 and 10 of the accompanying drawings."

"12. In cardboard or like boxes or cartons the use of metal fasteners constructed substantially as described and as illustrated in Figures 11 and 12 of the accompanying drawings."

"13. A structure in accordance with claim 9 or 10 wherein said fasteners are constructed and arranged substantially as described with reference to Figures 13 and 15 of the accompanying drawings."

"14. A structure in accordance with claim 9 or 10 wherein said fasteners are constructed and arranged substantially as described with reference to Figures 14 and 16 of the accompanying drawings."

These claims relate to the making and use of cardboard boxes with metal fasteners having prongs bent at right angles from the flat body or surface of the fastener. Metal fasteners ~~xxxxxxx~~ or staples of various shapes and sizes existed and were in common use for various purposes. Wire stitching or stapling was also used in connection with cardboard boxes. The size and shape of the stitching or stapling material depended largely upon the material to be fastened, and the choice of the manufacturer or operator. But the common knowledge and use of metal fasteners and staples was widespread. The new element of the box in Claim 9 and 10 is uniting the meeting edges by metal fasteners having a flat body or surface with a plurality of prongs, square ~~or~~ pointed (claim 9), and square (claim 10), bent at right angles to the body. It is said that such a fastener was never made before, or applied to a cardboard box, but even so, a mere change in shape is no invention. "Such a power of change is a necessary part of the knowledge of a competent workman in the particular art". "A mere ordinary development" in the making of fasteners is not an invention (See Fletcher Moulton on Patents 1st ed p 16). Consequently, in my opinion, there is no invention in the new element, either alone or in combination with the other elements of the claim. Similar observations are applicable to <sup>(the new element in</sup> claims 11 and 12, namely the form of fastener there referred to. The new element in Claims 13 and 14 is the construction and arrangement of the fasteners. Similar observations apply also to these claims. All are bad.

Claim 23 is:

"A box or carton constructed substantially as described with ~~particular~~ reference to Figure 1 of the accompanying drawings".

There is nothing in this claim that I have not dealt with under prior claims. It is also bad.

The Letters Patent No. 5116 of 1926 I hope to deal with more shortly.

The grant is for improvements relating to the jointing of cardboard or like boxes or packages. The primary object of the patentee, as set forth in his complete Specification, is to provide an improved and simplified method or means of forming interengaged joints of cardboard or like boxes without the use of metal fasteners or staples. The method or means suggested is applying an adhesive substance in the joint and pressing down the layers of the joint. Adhesive substances had been very commonly used for uniting overlapping edges of cardboard boxes, and for uniting paper of all kinds and descriptions together. And glueing tongue and groove joints together in boxes of wooden construction was a very ordinary practice. The Specification No 23801, already dealt with, had fully described the interengaging of joints in cardboard boxes by means of an open mouthed gullet.

Claim 1 of the Specification is:

"Improvements relating to the jointing of cardboard and like boxes or packages wherein portion of a corrugated intermediate layer is removed from between two side layers of composite material forming the box or package to thereby provide an open mouthed gullet along one of the meeting edge portions of the joint; characterised by applying an adhesive substance to the inner surfaces of the separated side layers at opposite sides of the said gullet, inserting the other or male meeting edge portion of the material into said gullet, and pressing said side layers against said male portion of the material, for the purpose specified".

The essence of this claim is using an adhesive substance for uniting the joints instead of metal fasteners. But using an adhesive substance for uniting the sides of boxes had long been in use, and the claim is but for an analogous use. Acquaintance with such an expedient was part of the knowledge of a competent workman in the particular art, and he could employ it when he did not wish to use metal fasteners. The real difficulty was in fashioning some mechanical contrivance by which this adhesive substance could readily and quickly be applied. But this claim does not involve such a contrivance; the adhesive substance, according to the specification and claim, might be applied by hand or by mechanical means. There is no exercise of the inventive faculty in directing that the interengaging parts of a joint be united by an adhesive substance instead of by metal fasteners. The claim is bad.

Claims 2 and 3 are:

"2. Improvements relating to the jointing of cardboard and like boxes or packages as claimed in Claim 1. characterised by spreading said separated side layers apart so as to enlarge the open mouthed gullet and thus facili-

tate the application of the adhesive substance to the inner faces of said side layers."

"3. Improvements relating to the jointing of cardboard and like boxes or packages as claimed in claim 2. characterised in that one of said side layers forming the open mouthed gullet is turned down or folded in a plane substantially at right angles to the opposite side layer prior to the application of the adhesive thereto, for the purpose specified".

These claims ~~were~~<sup>are</sup> working directions, part of the necessary knowledge of any competent workman in the art if he wished to use an adhesive substance in closing joints. The claims are bad.

Claim 4 is:

"A cardboard or like box of the type having two opposite pairs of end flaps adapted to be folded inwardly to close the adjacent end of the box, characterised in that one of said end flaps is provided along its outer edge with an open mouthed gullet formed between two side layers of the material forming the box, said gullet being adapted to receive the outer or meeting edge of the opposite end flap, substantially as described with reference to Figure 3 of the accompanying ~~diagram~~ drawings".

This is the application of the interengaged joint to the end flaps. Apart from any other objection, it is anticipated by the patentee's own Specification No 23801. The claim is bad.

Claim 5 is:

"The method of sealing the ends of cardboard or like boxes or packages substantially as described and as illustrated in Figures 2 and 3 of the accompanying drawings".

The method <sup>claimed</sup> is interengaging the joints and closing them with an adhesive substance. Interengaging the joints is fully described in the Patent No 23801. Merely closing them by means of an adhesive substance is no invention. The claim is bad.

Claims 6 and 7 are:

"6. A cardboard or like box or package having side walls composed of two flat side layers and an intermediate corrugated layer, characterised in that portion of said intermediate layer is removed at the end edges of said walls so that the end portions of said side layers ~~from~~ form inner and outer flaps which may be turned inwardly and adhered to opposite sides of a separate and closing piece substantially as described with reference to Figures 4 and 5 of the accompanying drawings".

"7. The method of sealing the ends of cardboard or like boxes or packages substantially as described and as illustrated in Figures 4 and 5 of the accompanying drawings."

These claims relate to an alternative method of constructing a cardboard box and sealing its ends. Corrugated material is removed from the sides of the box and a flap is formed by turning back the portion of the side from ~~which~~ which the material is removed. Separate end pieces are then inserted, and fastened by an adhesive substance to the flaps. All this seems to me, after

the disclosure contained in the Patent No. 23801, an ordinary development in the making of cardboard boxes, and one that any competent workman in the trade would naturally have made had he wished to do so. It involved no exercise of the inventive faculty. Both claims are bad.

Claim 8 is:

"An article or method in accordance with claims 6 or 7, characterised in that portions of said end flaps are removed to facilitate interturning and prevent puckering thereof substantially as described with reference to Figure 6 of the accompanying drawings".

This claim has particular reference to hexagonal cylindrical or like packages. The step forward ~~is~~ suggested is cutting away portion of the side of the boxes so as to form a V or other suitable figure which will fold easily over the end piece and prevent puckering. Certainly a very neat and attractive looking box or package is produced; but a housewife with her gores and gussets and her coverings for jars of comestibles would readily have perceived this method of closing the ends of a cardboard box cylindrical in shape. And the method is not, I think, beyond the ordinary development in the trade, and is one that any competent workman would have naturally employed had he wished to do so. The new element, whether taken by itself or in combination with the other elements of the claim, involves no exercise of the inventive faculty. The claim is bad.

The learned counsel for the patentee submitted that the Court should, before making any order for revocation, give the patentee leave to amend his specifications, pursuant to Section 81 of the Patents Act (Deeley v. Perkes 1896 A.C. 496, Geipel's Patent 1903 2 Ch 715). But I cannot see my way to do so. The Specifications would require to be rewritten, and I am not satisfied that any patentable invention is disclosed with respect to any of the matters brought before me.

Order that Letters Patent No 23801 of 1925 granted to Clarence Ferdinand Rainsford be revoked as to Claims 1,2,3,4,5,6,7,8,9,10,11,12, 13,14, and 23.

Order that Letters Patent No 5116 of 1926 granted to Clarence Ferdinand Rainsford be revoked as to Claims 1,2,3,4,5,6,7, and 8.

Order that Clarence Ferdinand Rainsford do pay the petitioner its costs of each petition, including therein the costs of shorthand notes.

Order that the petitioner do leave an Office Copy of this Order with the Commissioner of Patents.