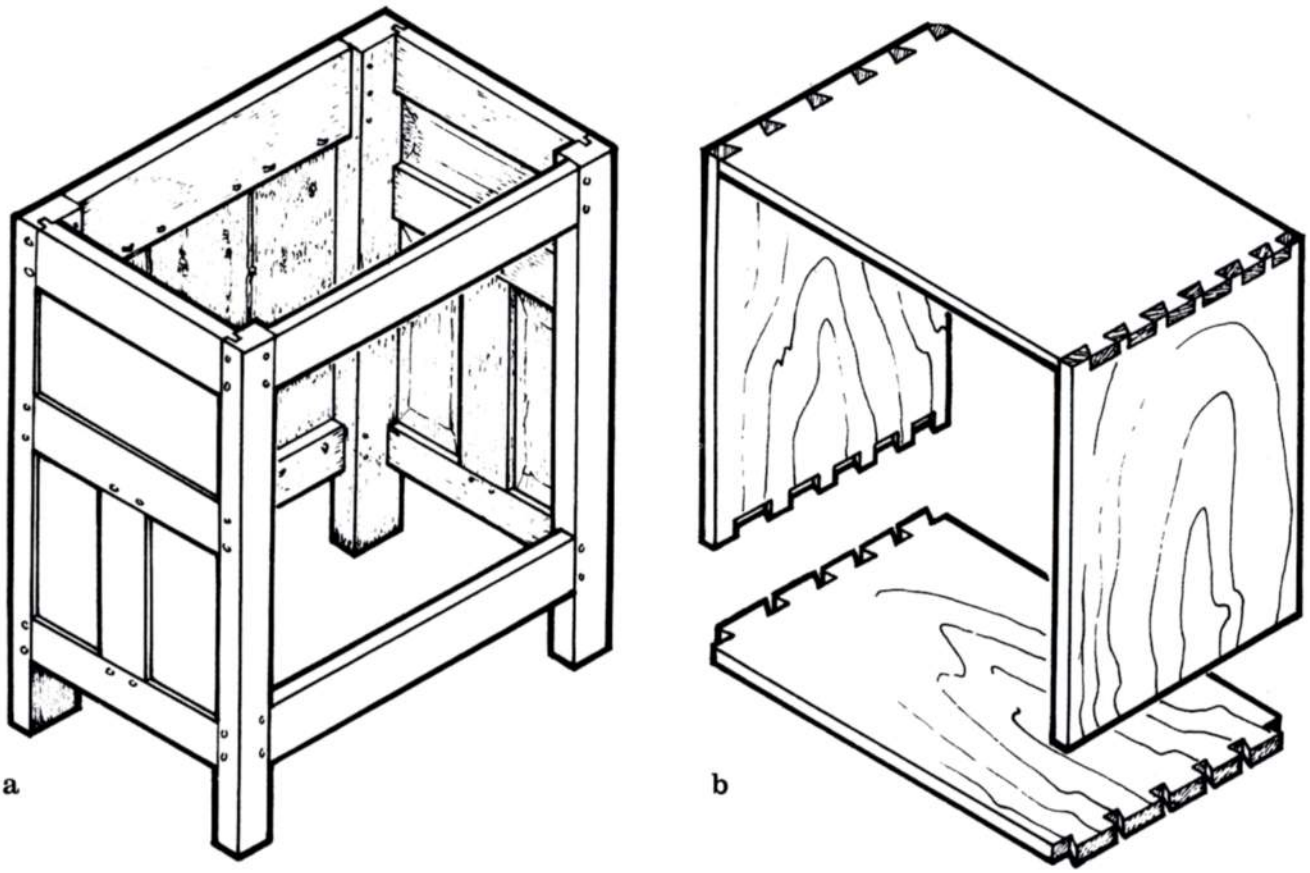

Diagram 2:20. a). *Framed-panel construction. The piece is assembled from a framework of rails and stiles which are united by mortice and tenon joints. The spaces may be filled with panels to create an enclosed space, or left as an open framework. This piece is envisaged as a small cupboard, waiting for the doors and top to be fitted. The back boards are simply nailed on over the broad rails, but in a better quality piece the back would be panelled. The main vertical stiles are carried down to form feet in the standard manner of joiners' work. This system of framing is highly flexible within its limitations, and is easily adjusted to provide a variety of forms such as seats, tables, cupboards, chests, bedsteads, or simply flat areas of wall panelling.*
b). *Dovetailed-board construction or 'cabinetwork'. Here the carcase is assembled from boards with flush surfaces, joined by dovetail joints (whether through or lapped). The through joints are then disguised in better quality work by applied mouldings or veneers. The whole piece (finished as a cupboard, chest or chest of drawers) is finally mounted on bun feet or bracket feet, or on a separate stand or plinth. Dovetailed-board construction was known and used in England since before the Middle Ages, especially for boxes and chests, but it did not become popular until after 1660, when it proved the ideal vehicle for the newly popular technique of veneering.*

construction was firmly established as *de rigeur* for the best case furniture. Joined panelwork continued to be used for another two hundred years in country-made furniture, but after this impetus of Continental influence the joiners' trade came increasingly under the control of the cabinetmaker, at least for any fashionable purpose. One effect of this was that the joiner sometimes tried to imitate the smooth and suave effects of cabinetwork design. This could be achieved in part by copying superficial ideas such as X-stretchers, twist-turning, and later cabriole legs. But attempts were also made to change the appearance of the panelling itself; first by enlarging the size of the panels, and later by fitting the panels flush with the surface of the frame. Other cabinetwork details also served to change the face of popular furniture design around 1680-1720 (such as architectural mouldings at the base and under tops, separate turned feet, and later bracket feet).

The effect of these subtle changes may be demonstrated in a series of drawings, based here on the end-views of typical chests of drawers (Diagrams 2:21 a, b, c and d).

To conclude, we have seen that although they were not amongst the trades most anciently concerned with furniture production, the joiners had established their supremacy over the other trades during the course of the sixteenth century, and had subsequently gained operative privileges at the expense of the other trades. The carpenters were still the dominant trade in timber house building, and the joiners sub-contracted to them for the supply and fitting of interior woodwork such as staircases, overmantels, panelling, doors and doorcases; and often for the furniture which was custom made for houses of quality. But for the independent production of furniture (the bulk of the market) the joiners were men of strength and self-determination.

This strength grew by means of legal battles between the trades, which often ended with advantage to the joiners. But in the end they were defeated by the dictates of fashion, in the form of a growing preference for the work of the cabinetmakers. By 1700 the London Joiners' Company was in serious decline, and this trend is reflected in many of the provincial companies. The new firms referred to themselves as 'Joiners and Cabinet-makers' (terms which now included a separate chairmaker).

vii). The Coffermaker and the Upholder (Figures 2:126-157)

Hard wooden frames and seats are not conducive to human comfort, and so it is not surprising that leather and fabric covers, draperies, and padded upholstery (whether loose or fixed) have long been associated with personal furniture such as seats and beds. There is no lack of evidence of the use of elaborate draperies and cushioned seats in classical times, but most indications are that the padding was in the form of stuffed, but separate, loose cushions. The cushions were put on the hard wooden seats, or on a base of slung leather, and occasionally behind the sitter.

In medieval Western Europe, exactly the same procedure is found. Manuscript illustrations show loose cushions used on turned or carved wooden thrones, though by 1400 some X-chairs may be seen which have slung leather or fabric seats, but with little indication of fixed upholstery.

It is not until after 1500 that the first suggestions of fixed padded upholstery are found in England. In 1546, for example, the ageing Henry VIII was being carted around Whitehall Palace in a chair called a 'tram', which was "...covered with tawney velvet, all over quilted...", and portraits of the middle years of the century often have in the background an

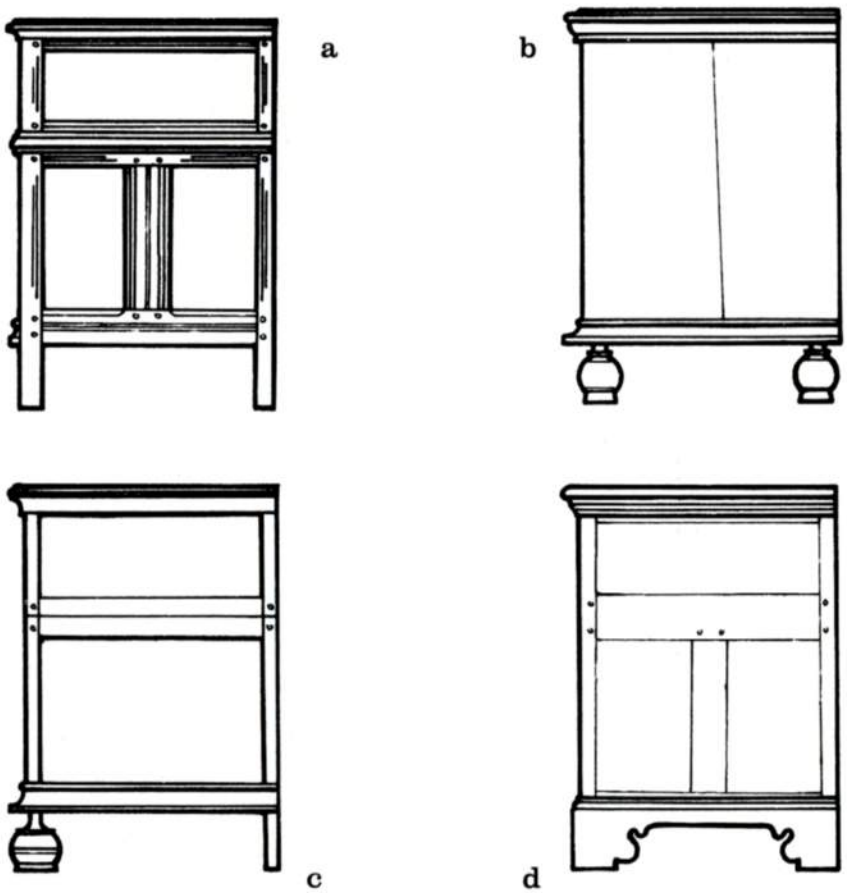

Diagram 2:21 *(right). A series of end views of typical chests of drawers 1680-1740. As the smooth-surfaced work of the cabinetmakers became increasingly fashionable after 1660, some joiners attempted to copy this rather bland characteristic within the limitations of their panelled work. At first they tended merely to enlarge the size of the panels, and the mouldings were omitted from the framework in order to reduce their visual impact. Later, after c.1720, they sometimes resorted to fitting flush panels which heightened the effect further.*
a). *c.1675. Traditional joiners' work built in two sections. The join is obscured by a heavy moulding across the middle, and the construction is fully panelled with edge mouldings to the framing-members.*
b). *c.1675. Fashionable cabinetmakers' work built in one piece. The smooth dovetailed boards are fitted with heavy top and bottom mouldings to enhance the architectural character of the piece, and with bun feet.*
c). *c.1690. Joined chest, still built in two sections, but with little visual emphasis on the framework. Heavy top and bottom mouldings are fitted, which hide the rails of the frame, and bun feet are adopted only at the front, where they will be seen to advantage.*
d). *c.1740. Joined chest mounted on bracket feet. The bland effect of the flush-panelled framework imitates the appearance of dovetailed boards very closely, if only at a distance.*

the grain. This is evident only on the rear and under surfaces of early work, since show-surfaces are normally finished smooth (Diagram 2:22a).

The marks of the pit-saw are likewise very distinctive and familiar to anyone who takes the trouble to inspect the rear surfaces of period furniture. They show a great variety in the depth and angle of the saw cut, unlike the regular and monotonous pattern left by a vertical machine-saw, in which the same cut is repeated every inch or so; or the regular curved line of the circular saw.

Pit-sawing is a filthy, strenuous and difficult job. Even so, it continued as the most commo method in English lumber yards until the second half of the last century. In Europe and America, water- and steam-powered sawmills were developed rather earlier. Industrial mechanical sawmills had been set up in Europe before 1500, but in England the pit-sawyers resisted the setting-up of mechanical mills until after 1800. In 1761, the Royal Society of Arts had presented a prize of £300 to one James Stanfield for the design of a mill which he had erected in Yorkshire. This was powered by a

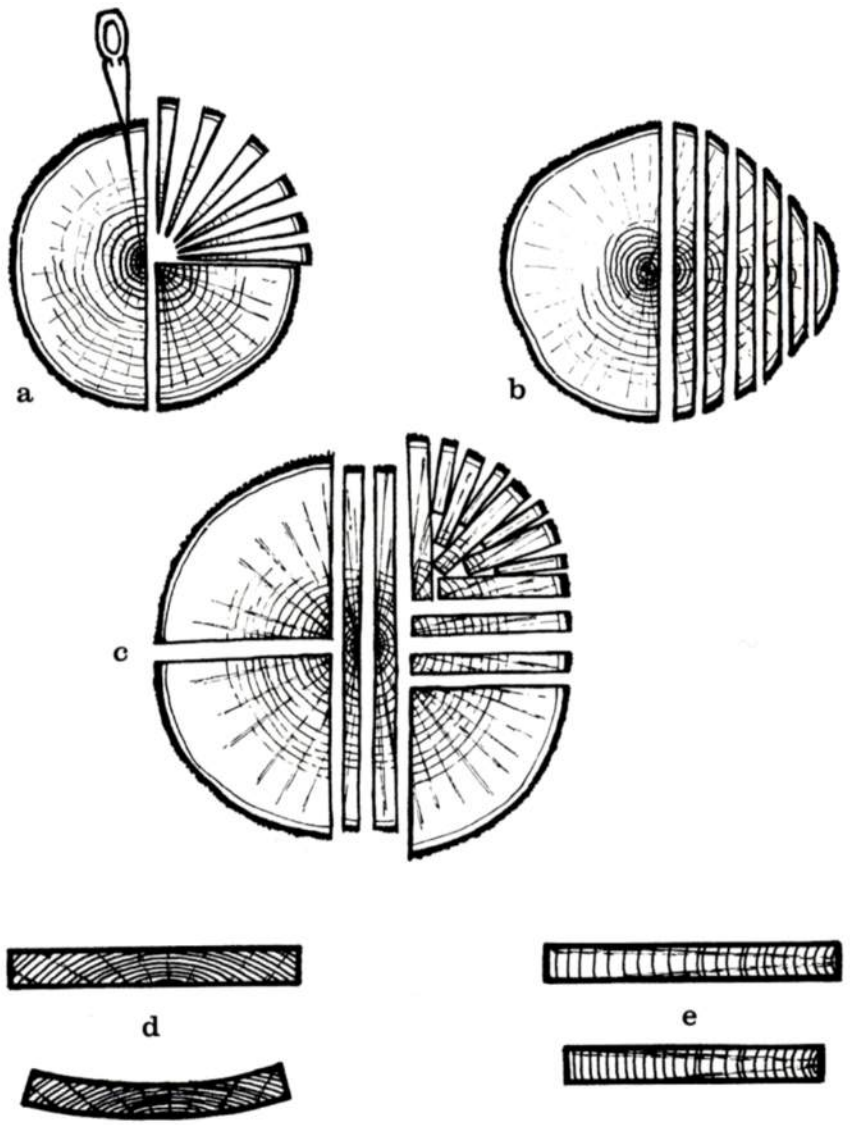

Diagram 2:22. *Methods of converting logs into planks.*
a). *Most timbers will rive or cleave quite easily down the grain, and this tendency will allow the timberman to split the log into planks of tapering thickness. Oak splits most easily along the radius of the log, so a wedge may be driven in along this line and the plank cleaves off like a slice of cake.*
b). *The simplest way to saw a log into planks is merely to start at one side and saw in progressive parallel cuts until the log is finished; this process is known as slash-sawing or straight-sawing. In practice, the log is roughly squared first. Planks from near the centre of the log may be of very good quality, but those from the edges are prone to warpage on drying (see d below).*
c). *The best way to produce sound planks is the process known as quarter-sawing. All the planks are thus cut as nearly as possible from the radius of the log. This is somewhat wasteful of a certain volume of timber, but both riven and quarter-sawn planks have two prime advantages over straight-sawn planks; they are resistant to warpage, and the medullary rays appear in profusion at the surface, producing a strong and attractive figure.*
d). *In straight-sawn planks the annual rings lie roughly across the width of the plank. In drying out (seasoning) the rings attempt to pull themselves straight, causing the plank to warp. The average shrinkage in oak is five to eight per cent.*
e). *In quarter-sawn and riven planks the annual rings lie across the thickness of the plank. In seasoning the plank loses some weight and size, but there is no tendency to warp.*