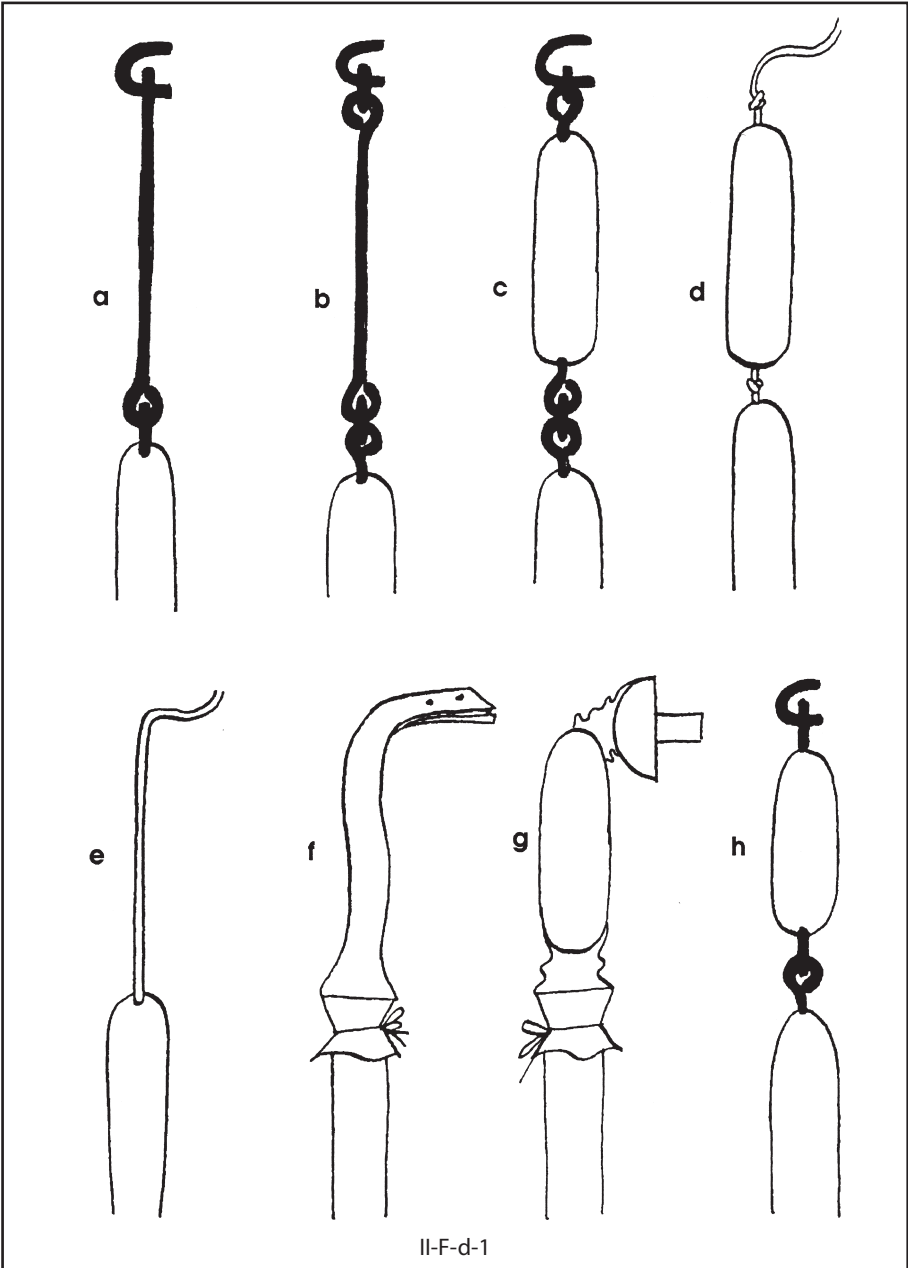
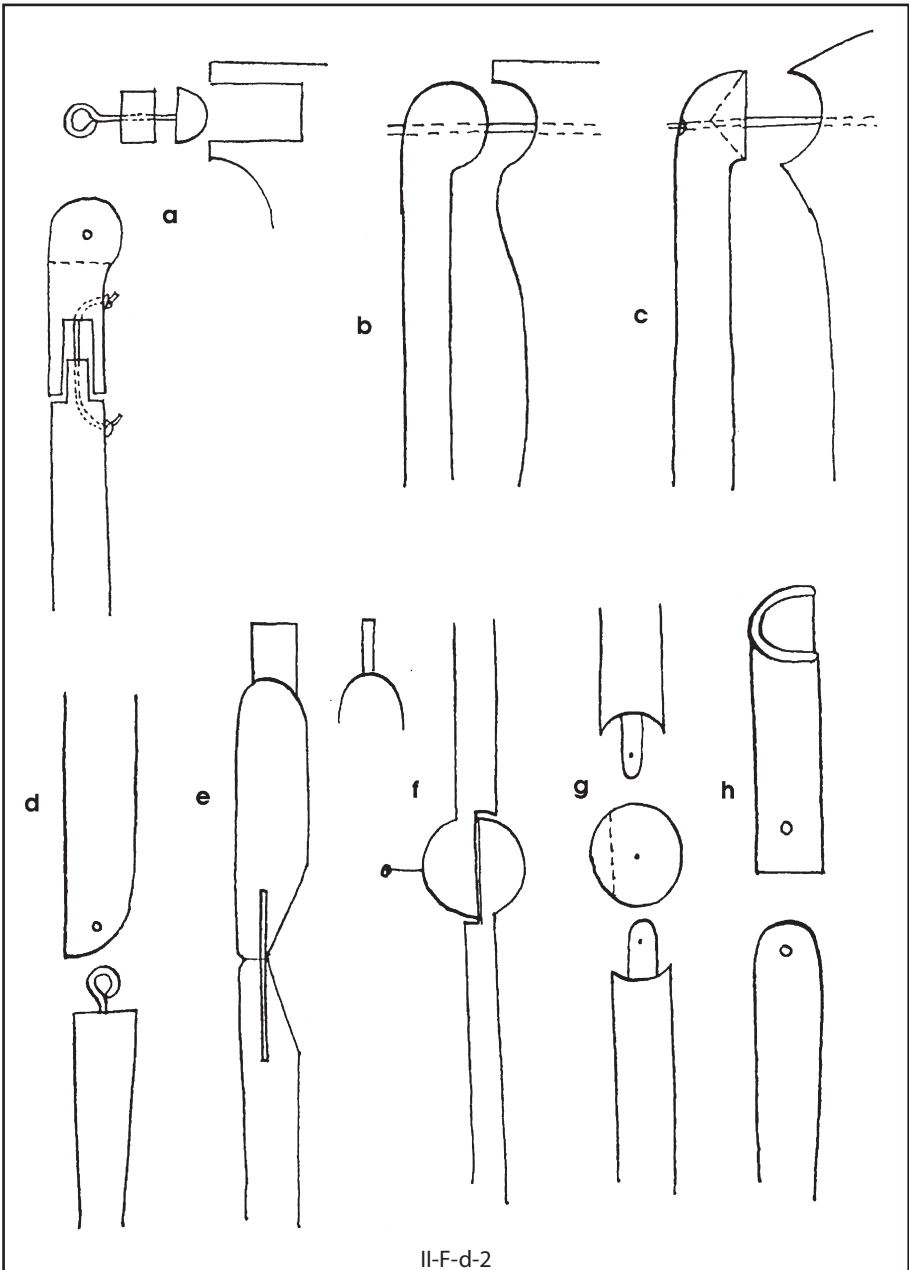


d) Arms and Hands

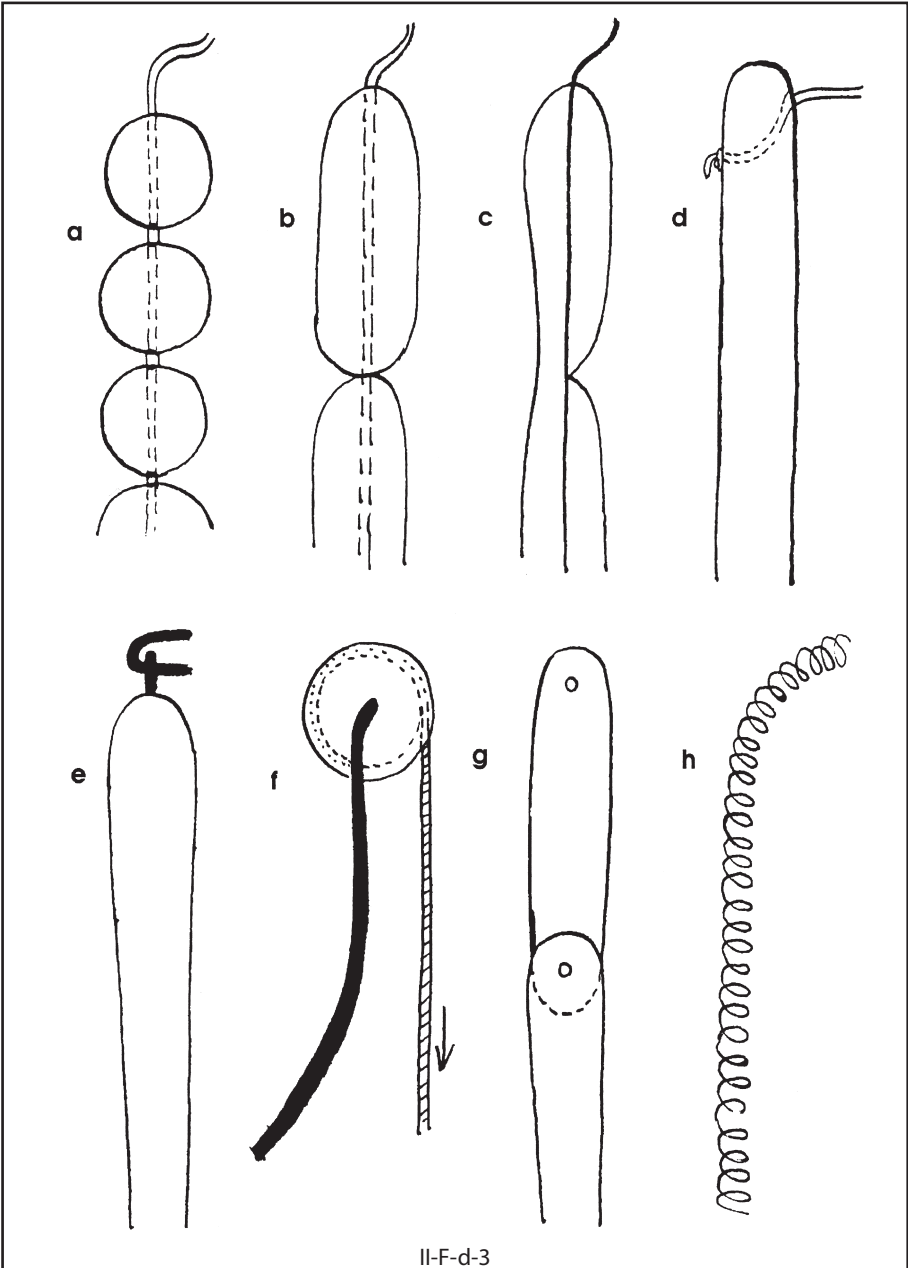
Shoulder and elbow joints are primarily found on rod marionettes, but also on string marionettes. They are usually very simple constructions. The way the arms are manipulated using the strings automatically forms the shoulder of the puppet and makes it look like an anatomically bearing shape. The joint between the shoulder and the forearm can be made relatively easily; by using a simple string (II-F-d-1-e) or by creating a small cloth sleeve between the lower and upper parts of the arm (II-F-d-1-f). The upper part of the arm is firmly attached to the shoulders of the puppet, as is very common in folk marionette designs. If the costumes of the puppet only mask the “absence” of the arm material, only the upper part of the arm will be covered by the material (II-F-d-1-c, d, g, h). If the puppet uses props (such as a sword), the string or “sleeve” method is not always suitable (II-F-d-1-a, b, c, d, g, h). It would be more suitable perhaps to “define” a solid distance from the shoulder to the elbow, if we are not considering any other kind of aesthetic effects.

Far more attention must be paid to the elbows of the rod puppet (the Czech school), and the wrist of the puppet that rotates during manipulation; this solicits a limited movement of the elbow on the opposite side. These are designs of elbow joints that are very similar to the ankles of a marionette (II-F-d-2-d, e, f, g, h). Mannequins require far more strength and power to be manipulated, and bear similar joints that we can often find on children's dolls (II-F-d-2-a, b, c). One can regulate the strength needed to operate a mannequin by using rubber or leather straps to create the joints. The joint can be so rigid that the puppet can be posed like a “mannequin” in particular positions. The way they are manipulated, or even their solitary artistic style, can be reflected through the demands of “other” technologically required movements. The upper arm (II-F-d-3-a) is made entirely out of beads tied together on a piece of leather or string. Two oval pieces (II-F-d-3-b) are used like beads or the entire arm is created by “sculpting” a piece of foam rubber; the elbow is shaped into the material (a string or piece of leather is used only to increase the stability). In the illustration (II-F-d-3-d, e), the upper and lower arms are not separated at the elbow. The diagram of the arm (II-F-d-3-f) is perhaps that of a marching soldier, the movement in the shoulder by is created by pulling a string; its own weight causes it to return to its original position. In flat puppets, it is enough to use a loose rivet or piece of string (II-F-d-3-g). Or a spring can be used to make the entire arm (II-F-d-3-h).



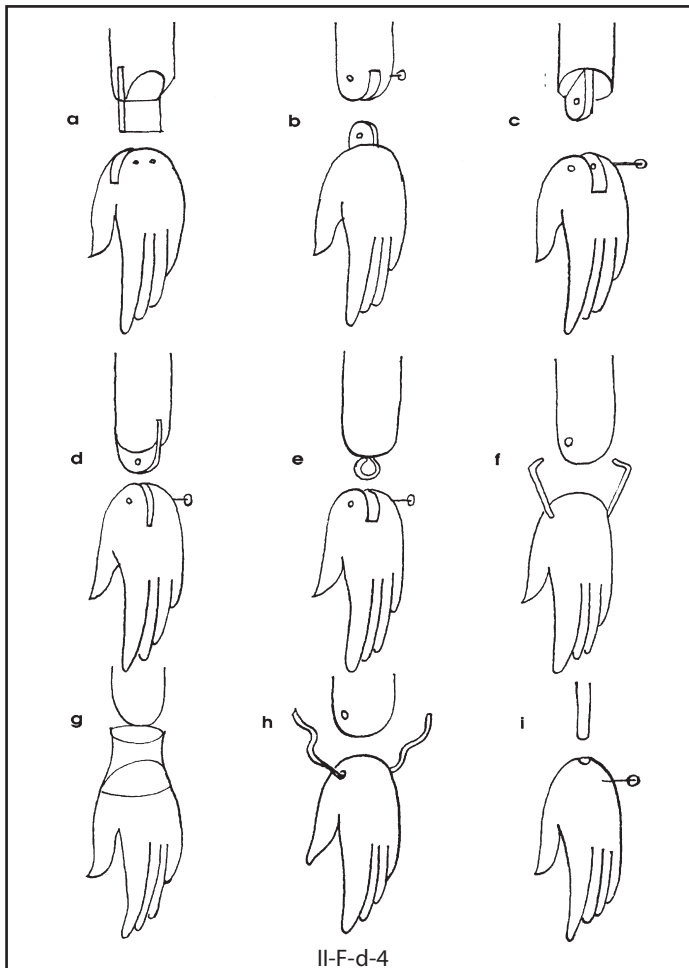


II-F-d-2



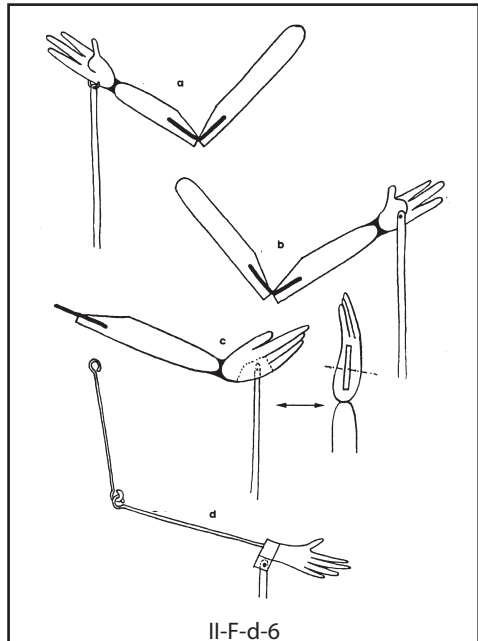
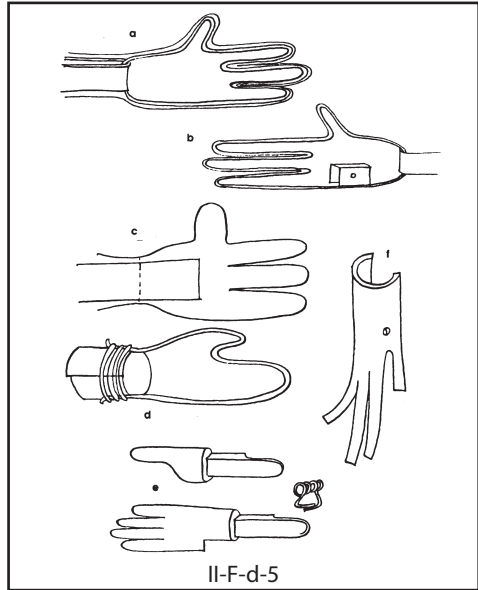
II-F-d-3

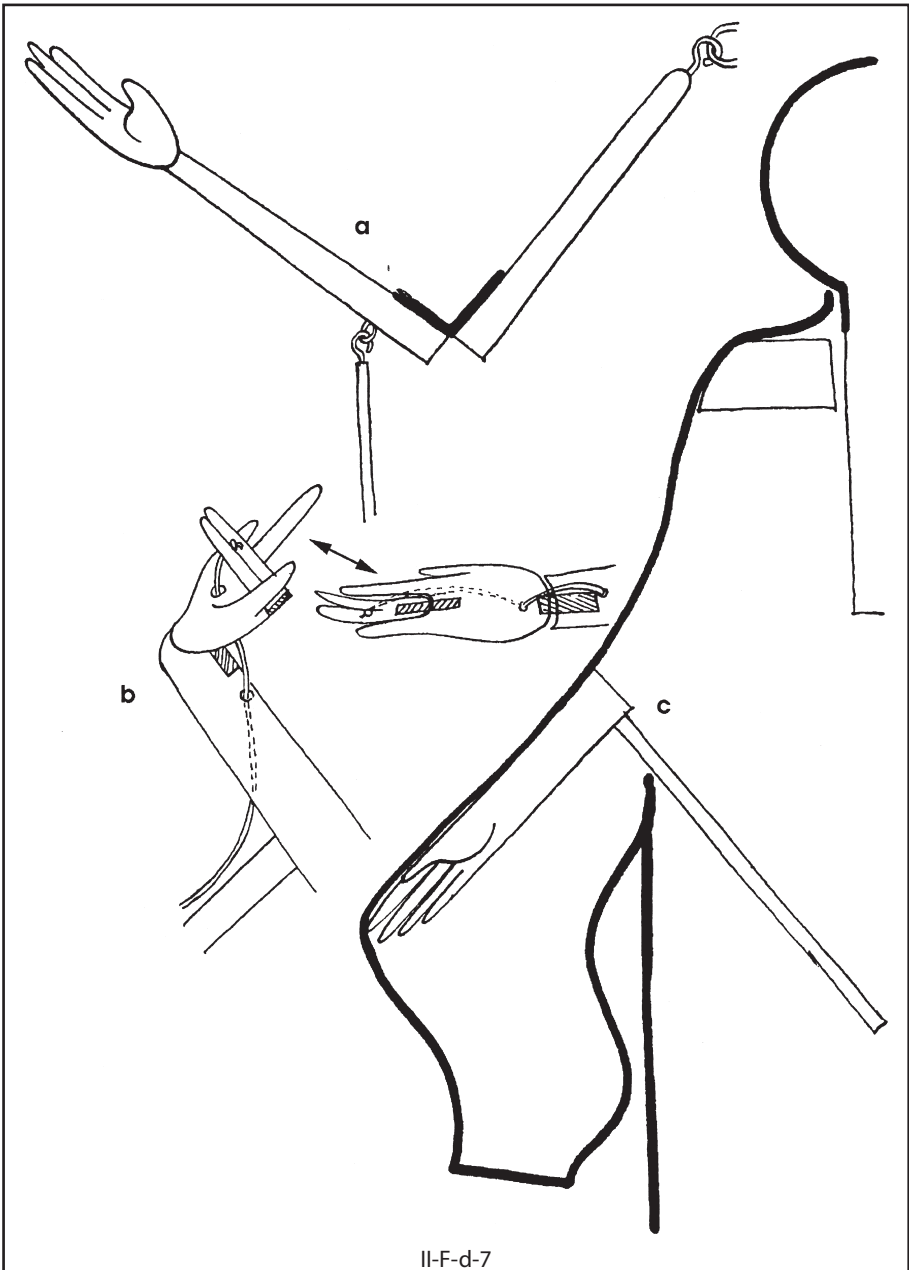
When hands of folk puppet marionettes are added to create the entire arm (complete with a forearm), performing with the hand has its own charm – be it a marionette, a rod puppet or a mannequin. The illustrations (II-F-d-4) show several ways of attaching the hand to the puppet, whether one uses leather (II-F-d-4-a), or a wooden or metal tongue in a groove (II-F-d-4-b, c, d); sometimes it's enough to simply use an eyelet screwed into the wood (II-F-d-4-e) or create a wire hinge (II-F-d-4-f). It is possible to again make a textile “sleeve” (II-F-d-4-g), attach it with only a string or a piece of leather (II-F-d-4-h) or with a circular piece of leather (II-F-d-4-i). The hands can also be made from cloth. The “skeleton” of



the hand is shaped with a piece of wire, so it is sufficient to simply wrap a leather strap through the wire hand (II-F-d-5-a); the “skeleton” on a rod puppet will also need a clamp in order to attach it to the rod (II-F-d-5-b). The little hands sewn onto a hand puppet have cylinders attached to their wrists (a ring) for the finger of the puppeteer (II-F-d-5-c, d). The hands can be made from dissected tubes then formed by melting them into shape. A hand held in place by a peg can “hold” props (II-F-d-5-f).

As I have already mentioned, operating the hand of the rod puppet has its own specific qualities. The operating rods are attached to the hands of the puppet in many different ways, according to the different regions and “schools” (II-F-d-6). The “typical Czech way” is seen in the figure (II-F-d-6-c, d). Not only is the result a unique kind of gesture of the puppet, but it constitutes a desire to hide the puppet manipulation inside the costume, next to the firmly attached rod located under the elbow of the puppet and its long and wide covering sleeve (II-F-d-7-a). Undoubtedly, this inspiration arose from Japanese theatre, where the puppets’ costumes are “kimonos” (II-F-d-7-c). So, there is no real problem in even moving the fingers (II-F-d-7-b), speaking with the fingers, hands and gestures as found in the theatre of the Orient.





II-F-d-7