Key to Mueller-Ward Model of Skeletal Muscle—highly diagrammatic
(approximate magnification 1000x)

A, B. Model seen from opposite sides. Portions of three fibers are represented, showing different types of endings. On this scale of magnification an entire fiber would be several meters long.

C, D. Upper and lower ends of model. Cross-sections of fibers show three different arrangements of the structural elements.

1. Notched ending of the type commonly arising from periosteum
2. Rounded ending of the type usually seen in union with a tendon
3. Tapered ending, characteristic of terminations within the body of the muscle
4. Cross-section of a fiber, showing peripheral nuclei and myofibrils grouped in Cohnheim’s fields
5. Cross-section of fiber with peripheral and central nuclei and myofibrils arranged in Cohnheim’s fields
6. Cross-section of fiber showing myofibrils uniformly distributed throughout sarcoplasm
7. Sarcolemma
8. Central nucleus
9. Sarcolemma removed to show the myofibrils
10. Peripheral nucleus
11. Peripheral nucleus underlying sarcolemma
12. Connective tissue (endomysium). This ensheaths all fibers of the muscle and serves as a pathway for nerves and blood vessels
13. Nucleus of a connective tissue cell
14. Myelinated nerve fiber
15. Non-myelinated nerve fiber
16. Motor end-plate underlying sarcolemma (hill of Doyere)
17. Sarcolemma and sarcoplasm removed to expose motor end-plate
18. Capillary net. Skeletal muscle is highly vascular.