



EXPLANATION

- |   |     |   |               |
|---|-----|---|---------------|
| Recent and Recent and Pleistocene Pleistocene | Qr  | River alluvium  | QUATERNARY    |
|   | Qct | Calcareous tufa   |               |
|   | Qu  | Undifferentiated stream deposits, slope wash, and talus. <i>Mainly Recent but includes some Pleistocene</i> |               |
|   | Qd  | Deer Plain formation, Wisconsin stage   |               |
| Pleistocene                                   | Ql  | Loess, including some windblown sand  | QUATERNARY    |
|   | Qb  | Brussels formation, Sangamon (?) and Illinoian stages. <i>Smaller remnants omitted</i>                      |               |
|   | Qp  | Pond deposits marginal to the Illinoian ice   |               |
|   | Qt  | Till and stratified drift. <i>Distribution represented somewhat diagrammatically</i>                        |               |
| Miocene (?)                                   | Qm  | Hard-pitted clay, Yarmouth (?) stage  | TERTIARY      |
|   | Qg  | Gravel and till (?) near Batchtown, Kansan stage  |               |
|   | Qs  | Grover gravel, UNCONFORMITY   |               |
|   | Qc  | UNCONFORMITY  |               |
| Pennsylvanian                                 | Pm  | McLeansboro formation   | CARBONIFEROUS |
|   | Pc  | Carbondale formation  |               |
|   | Pp  | Pottsville formation, UNCONFORMITY  |               |
|   | Pst | St. Louis limestone, UNCONFORMITY   |               |
| Mississippian                                 | Ms  | Warsaw formation and Spargen limestone  | CARBONIFEROUS |
|   | Ke  | Keokuk limestone  |               |
|   | Sb  | Sedalia and Burlington limestones, UNCONFORMITY   |               |
|   | Ch  | Chouteau limestone  |               |
| Kinderhook group                              | Hs  | Hannibal shale  | DEVONIAN      |
|   | Ls  | Louisiana limestone and Glen Park formation, UNCONFORMITY   |               |
|   | De  | Cedar Valley limestone, becomes thin and discontinuous to the southwest, UNCONFORMITY                       |               |
|   | Ed  | Edgewood, Brassfield, and Joliet limestones, UNCONFORMITY   |               |
| Upper Ordovician                              | Om  | Maquoketa shale, UNCONFORMITY   | ORDOVICIAN    |
|   | Ok  | Kimmswick limestone   |               |
|   | Od  | Plattin and Decorah limestones, UNCONFORMITY  |               |
|   | Oj  | Joachim dolomite  |               |
| Lower Ordovician                              | Os  | St. Peter sandstone, UNCONFORMITY   | ORDOVICIAN    |
|   | Oc  | Cotter (?) dolomite   |               |

Actually, because of the widespread mantle of Pleistocene loess, extensive exposures of bedrock are restricted to the nearly vertical bluffs and the narrow stream beds, with only small scattered exposures on the intervening hill sides and slopes. That is, bedrock exposures, even though closely spaced, are in reality small and discontinuous and, on the scale of this published map, virtually all contacts between different formations should be represented by dashed lines.

- Contact
- - - Dashed where approximately located, dotted where concealed
- U Fault
- U, upthrown side; D, downthrown side
- - - Dashed where approximately located
- 5 Strike and dip of beds
- 55 Strike and dip of overturned beds

Base from U. S. Geological Survey maps of Hardin and Brussels quadrangles, Illinois

GEOLOGIC MAP OF HARDIN AND BRUSSELS QUADRANGLES, ILLINOIS

Geology by W. W. Rubey, 1928-29