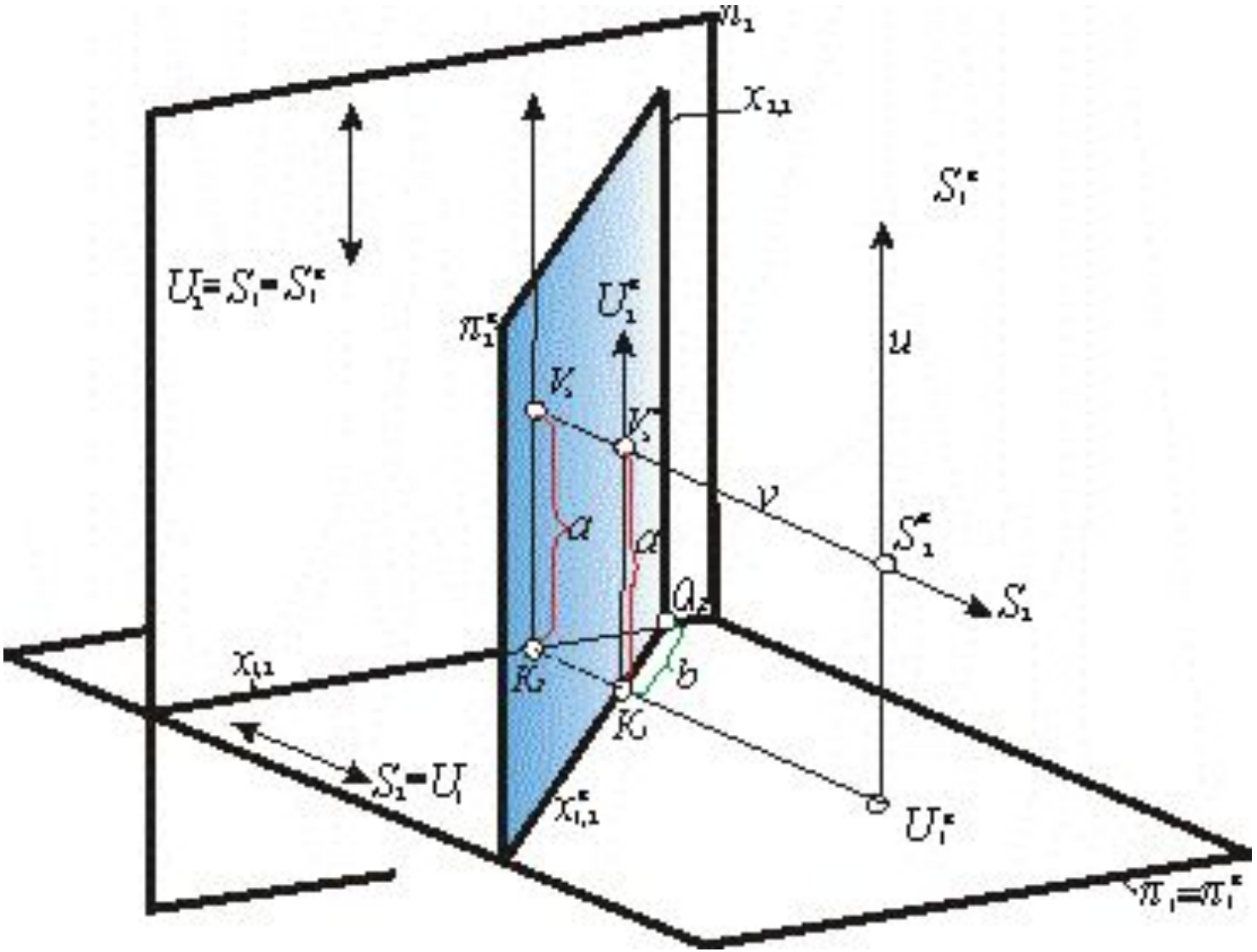
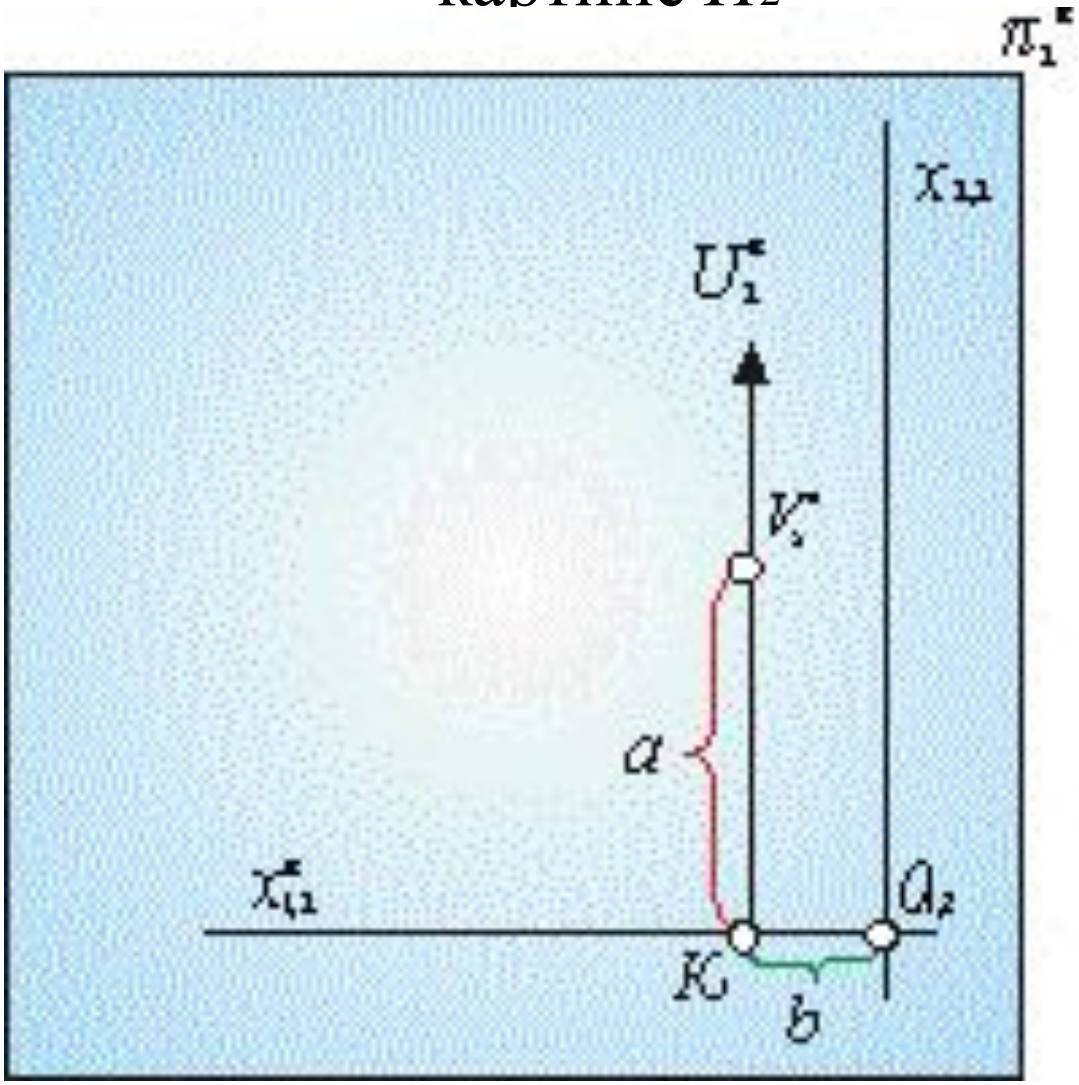
ПОСТРОЕНИЕ ПЕРСПЕКТИВЫ ПО ЭПЮРУ МОНЖА

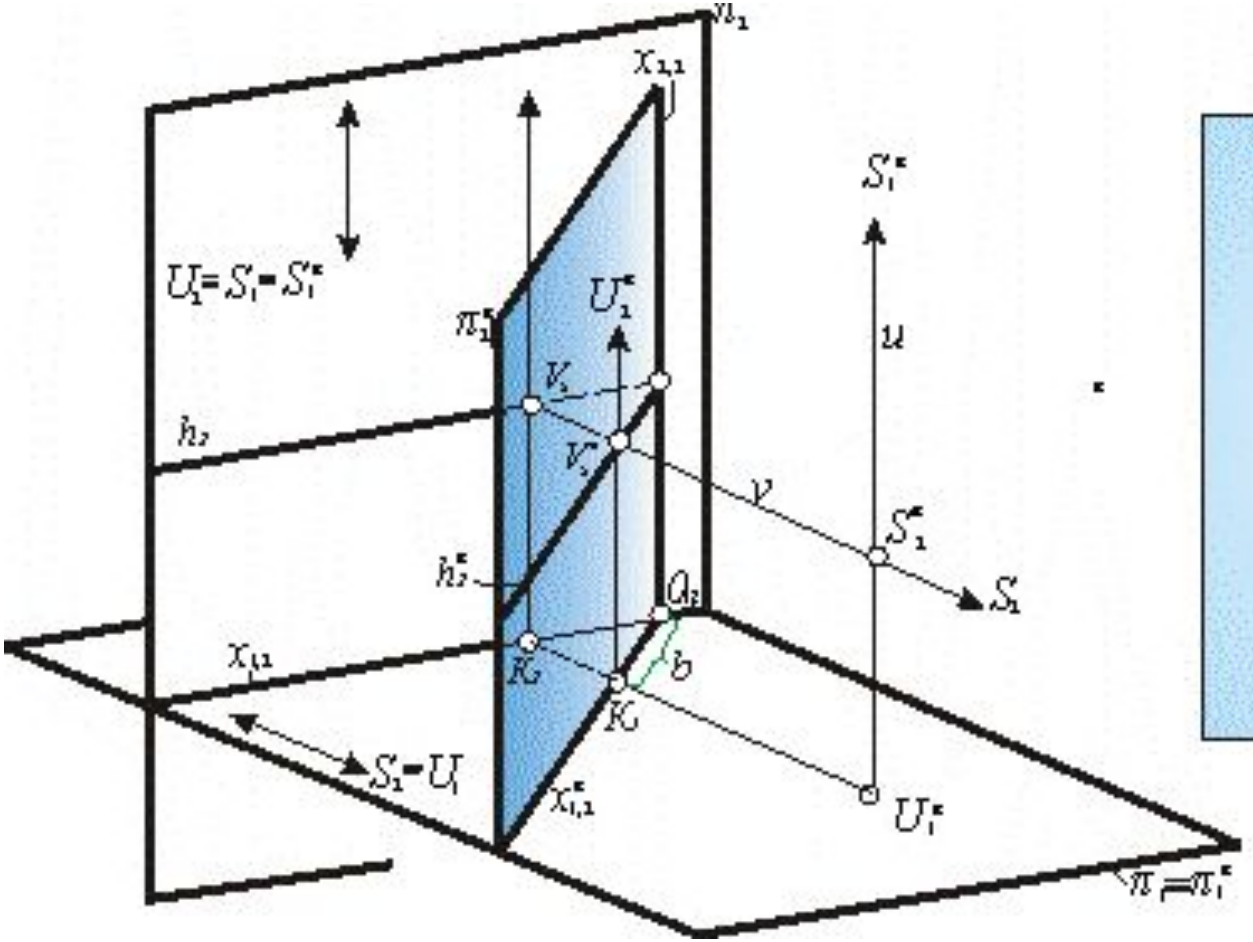
Совмещенный проекционный аппарат перспективы и эпюра Монжа

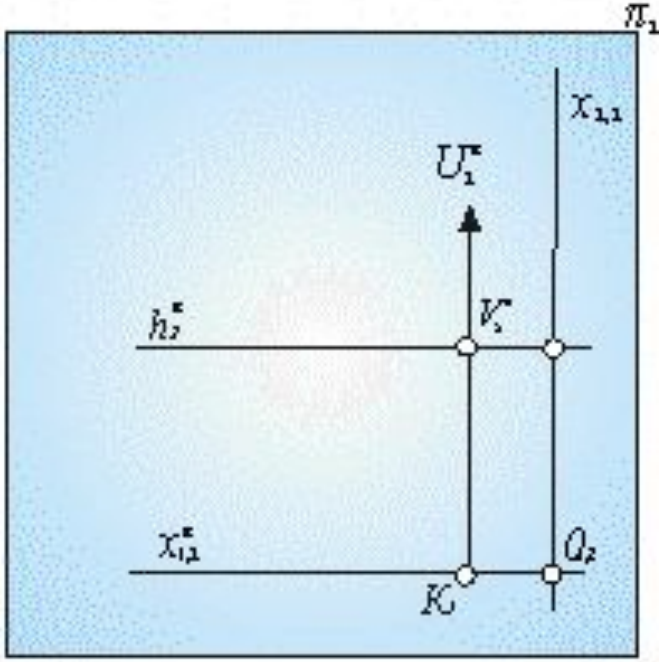


Расположение базовых элементов в перспективе на картине $П_2$

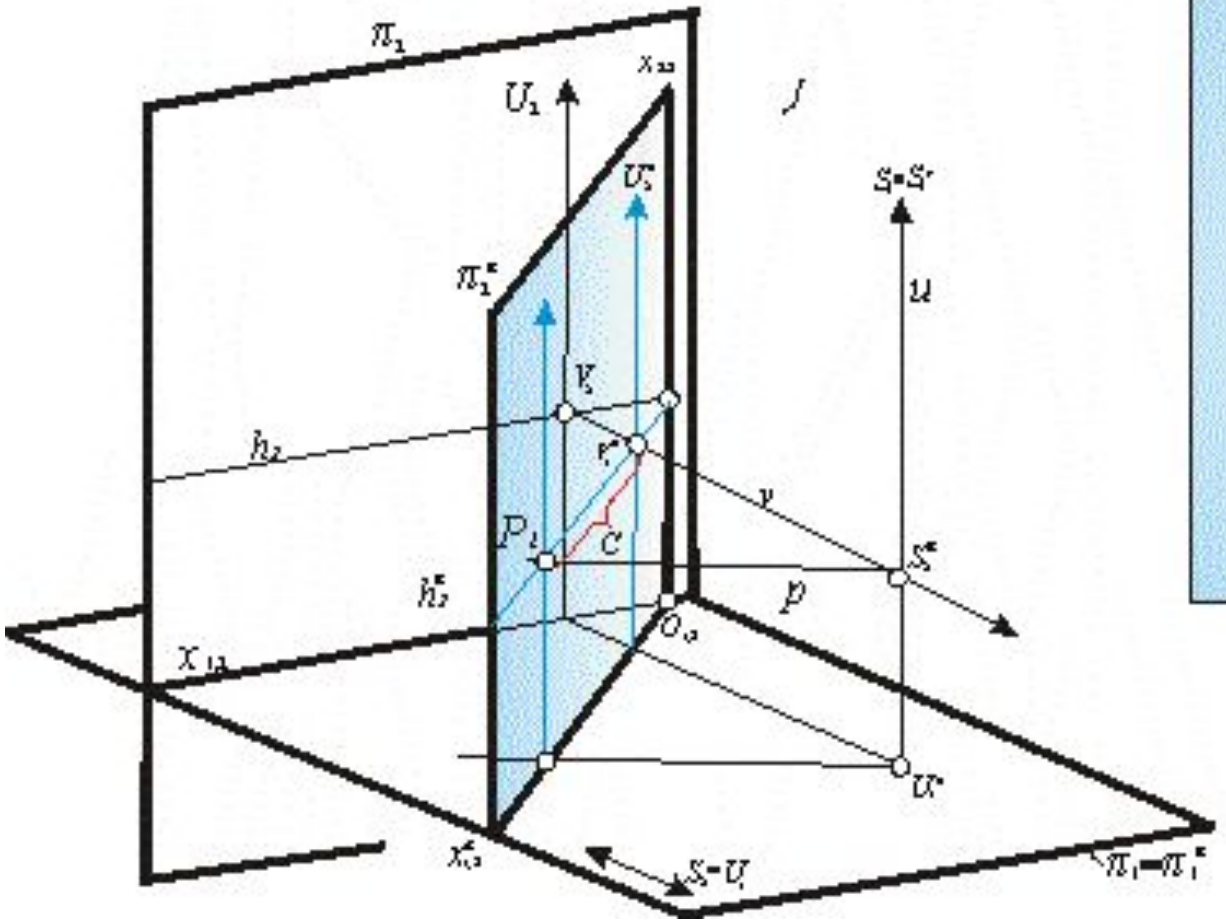


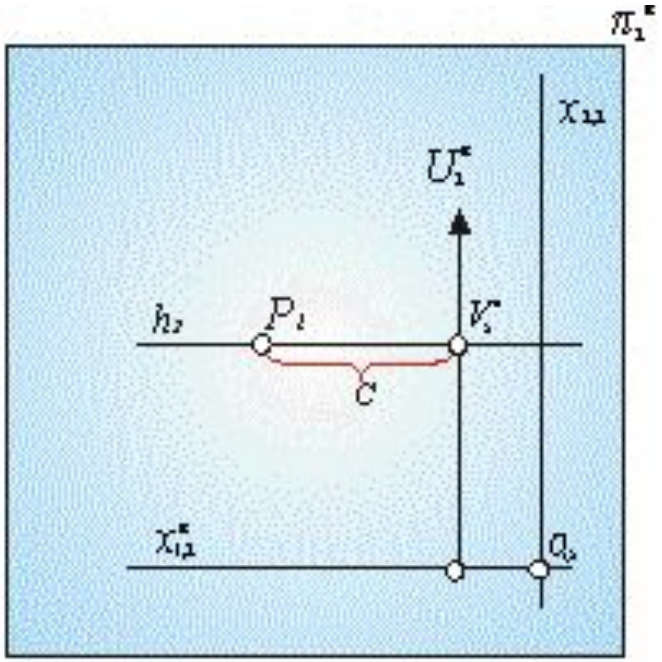
Изображение горизонтали



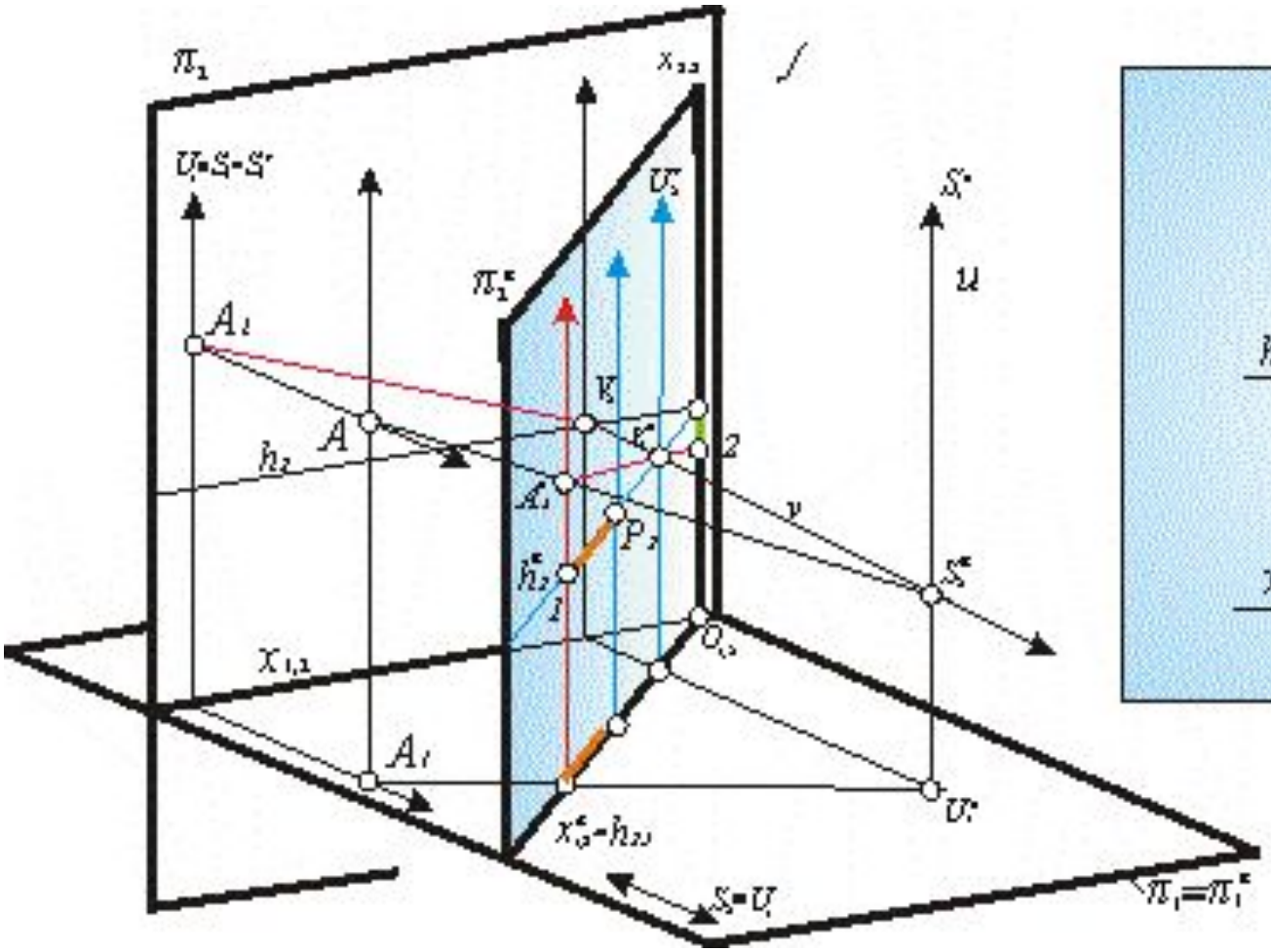


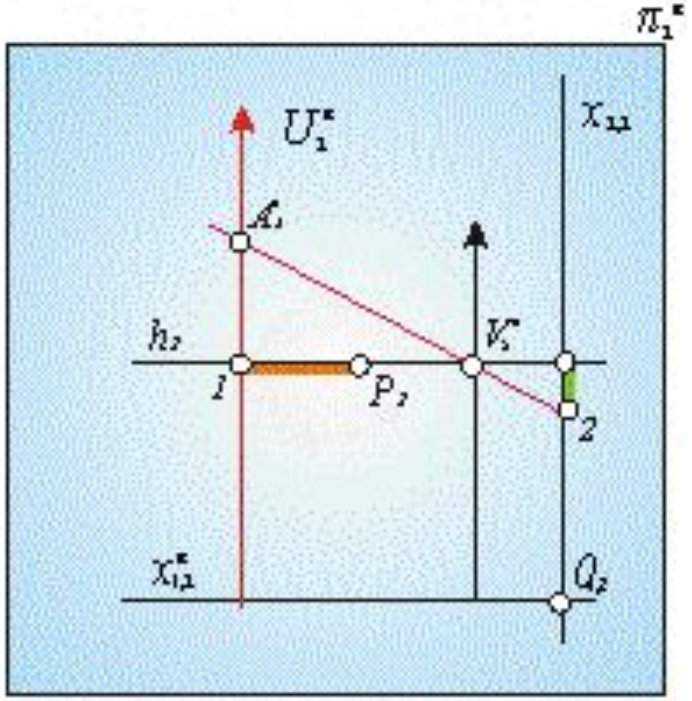
Изображение главной точки



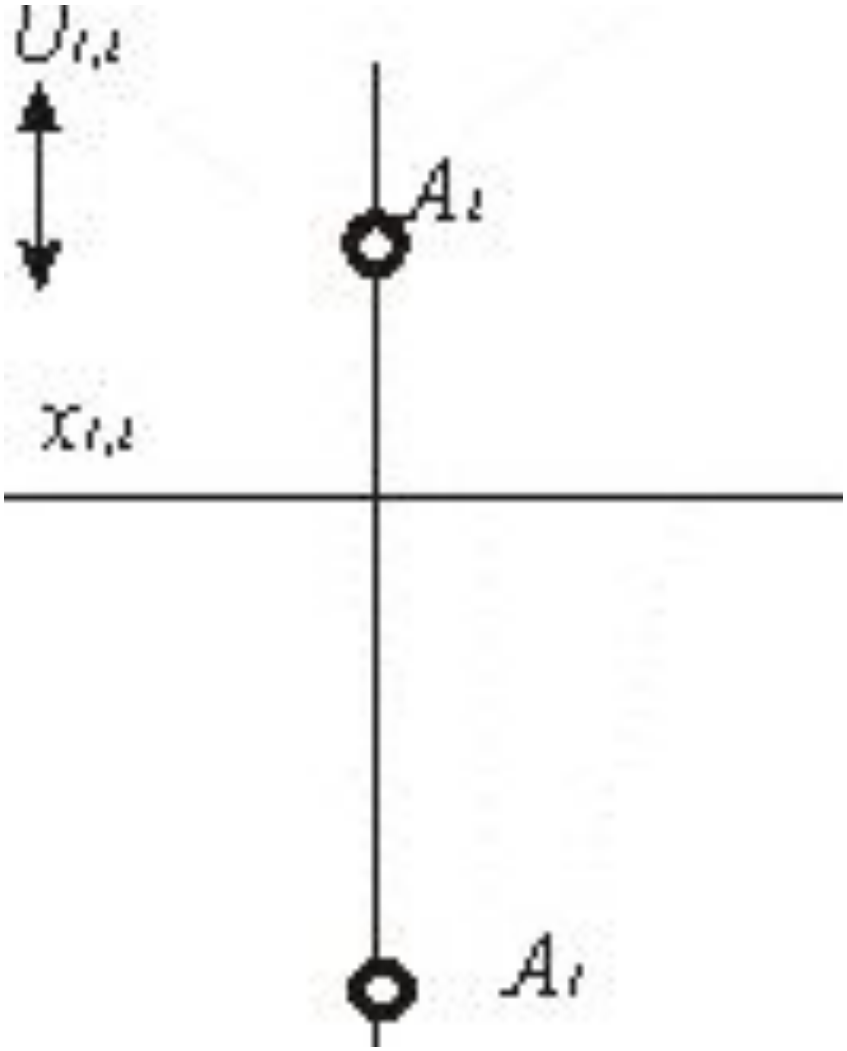


Взаимное расположений проекций точек

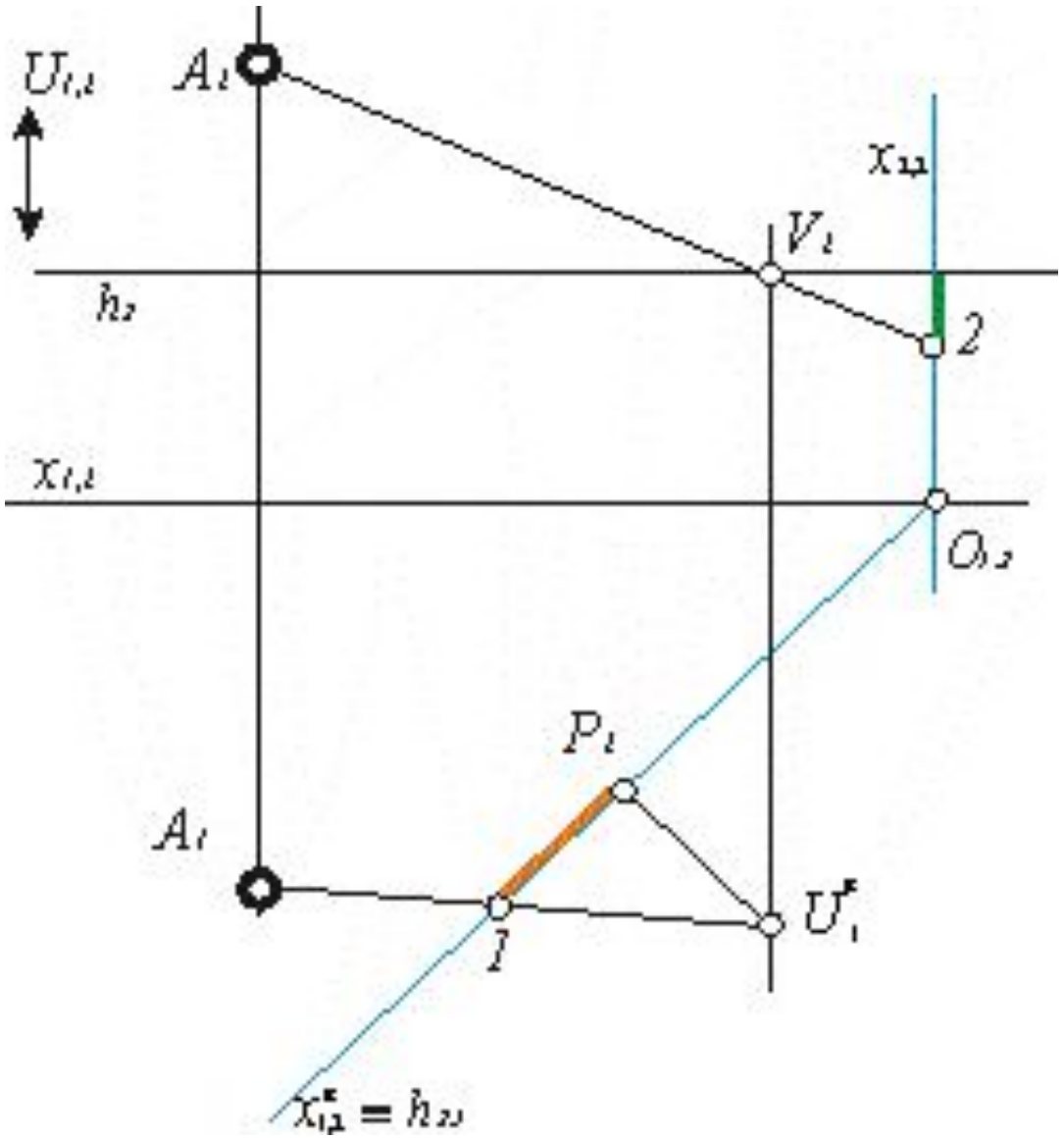




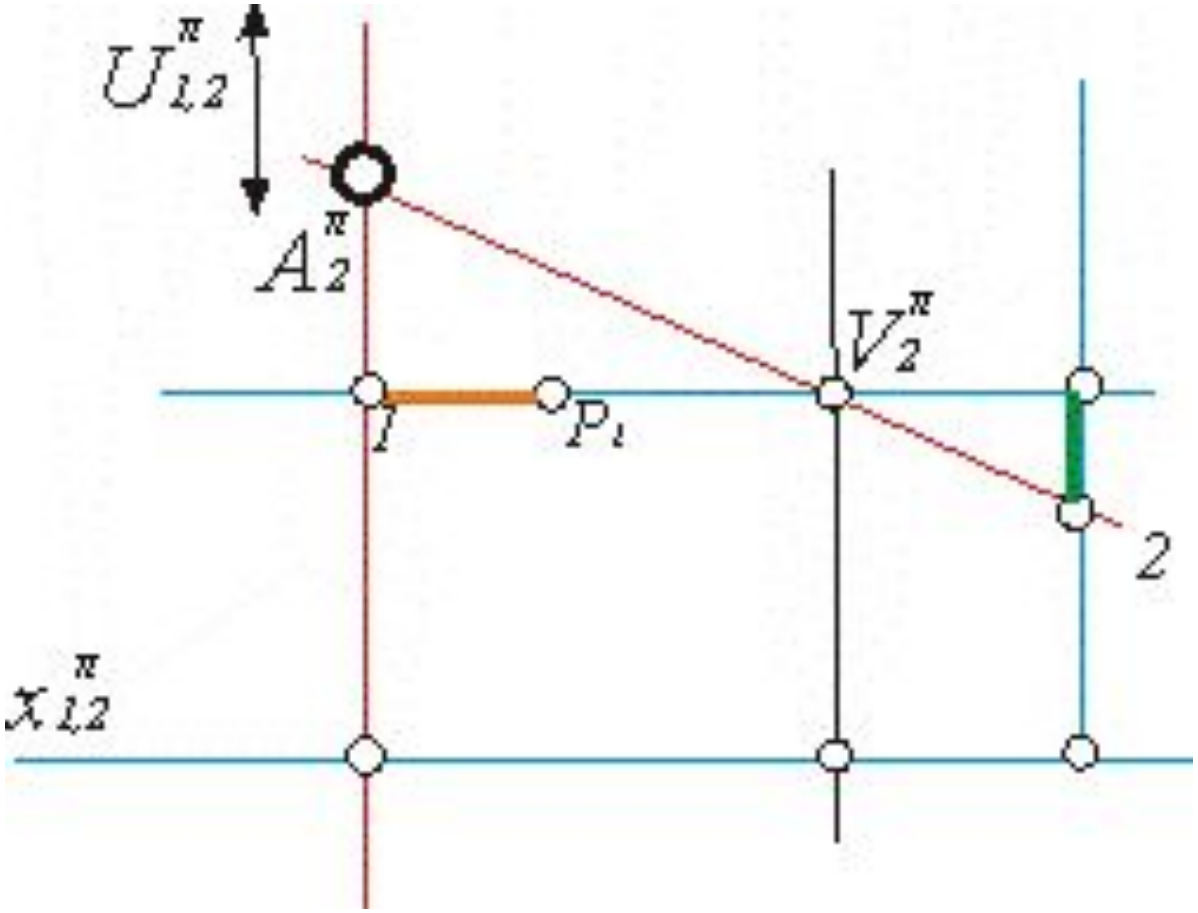
Алгоритм построения перспективы точки по эпюру Монжа



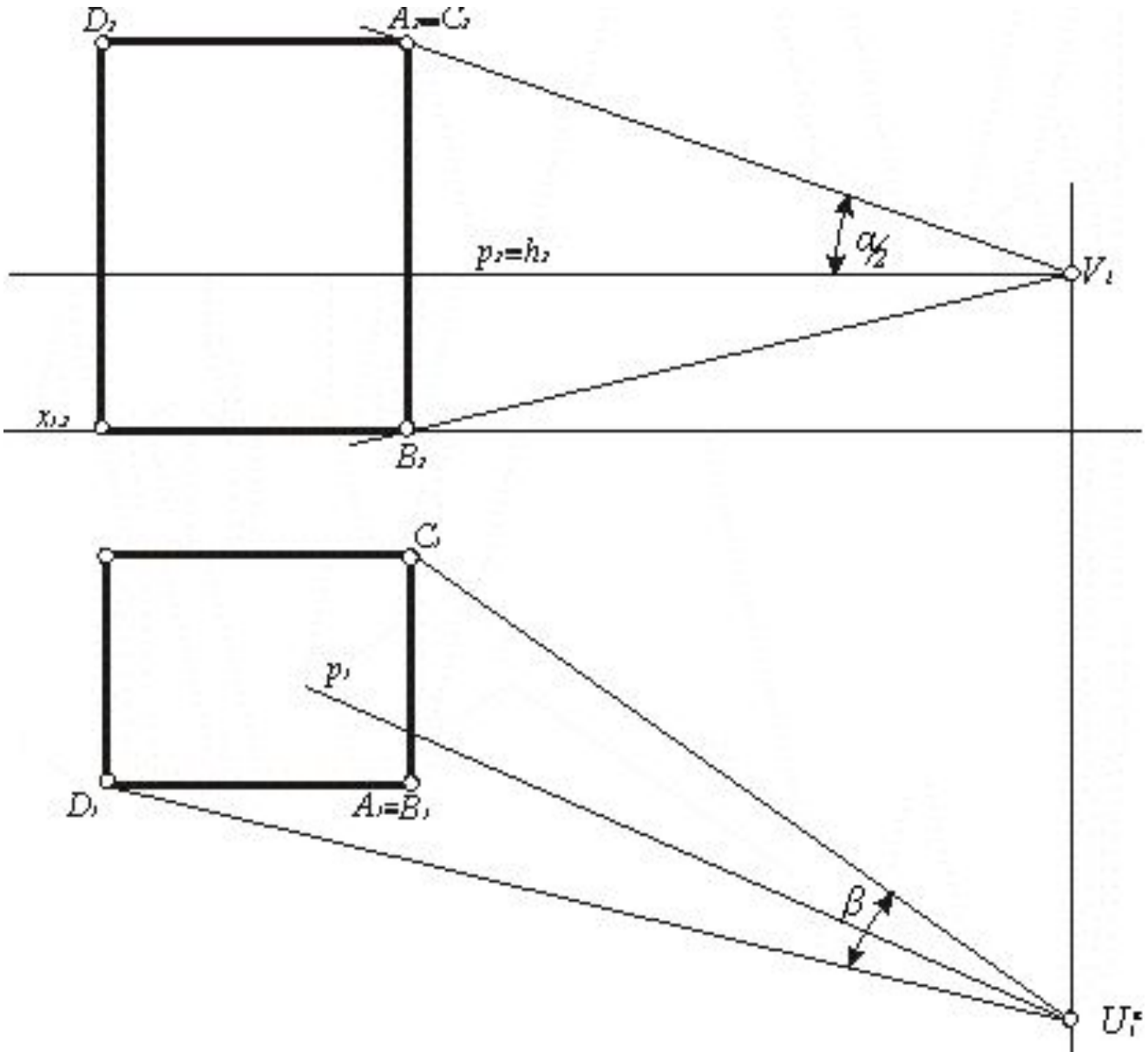
1. Изображение на эпюре Монжа



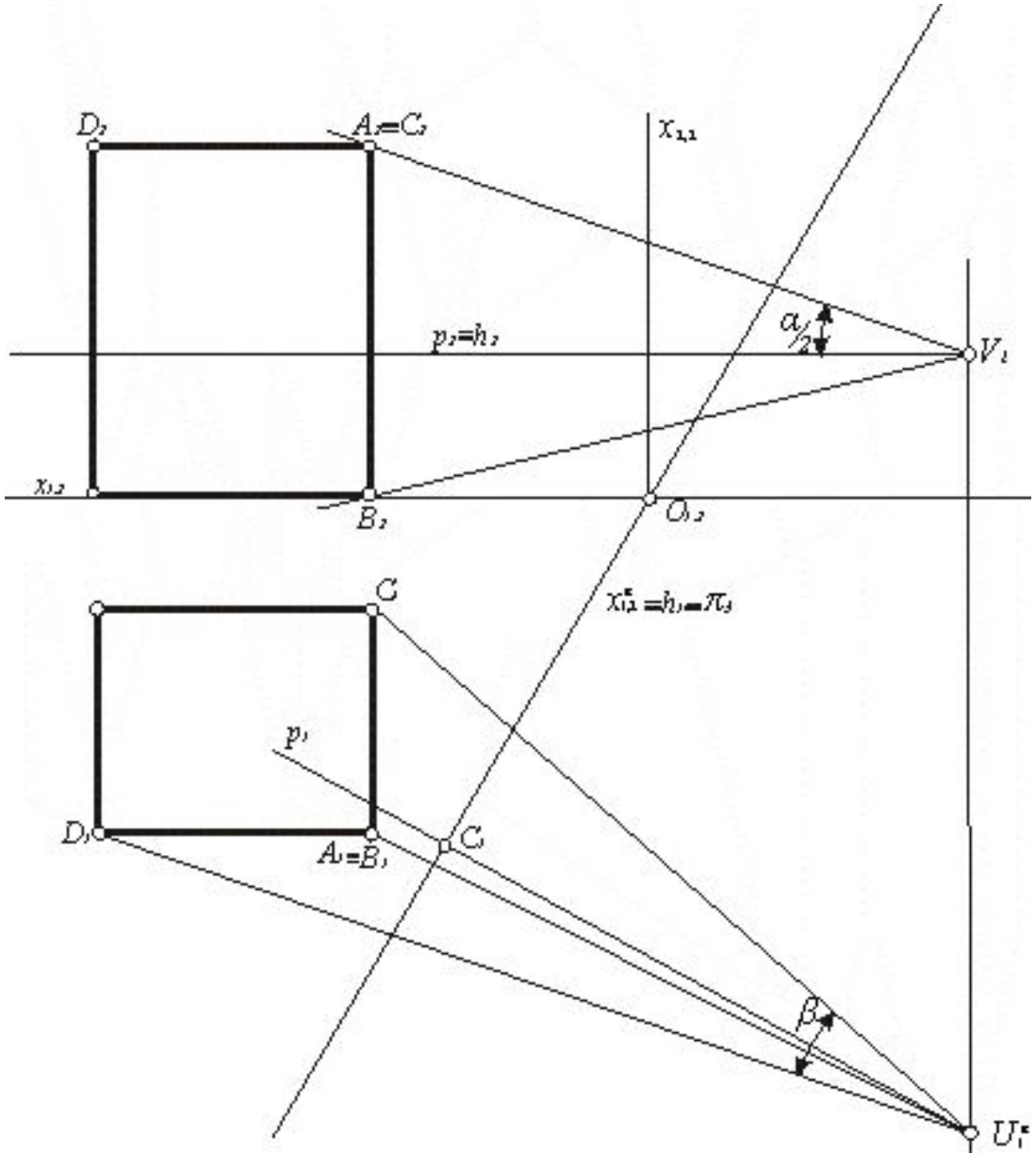
2. Изображение точки в перспективе



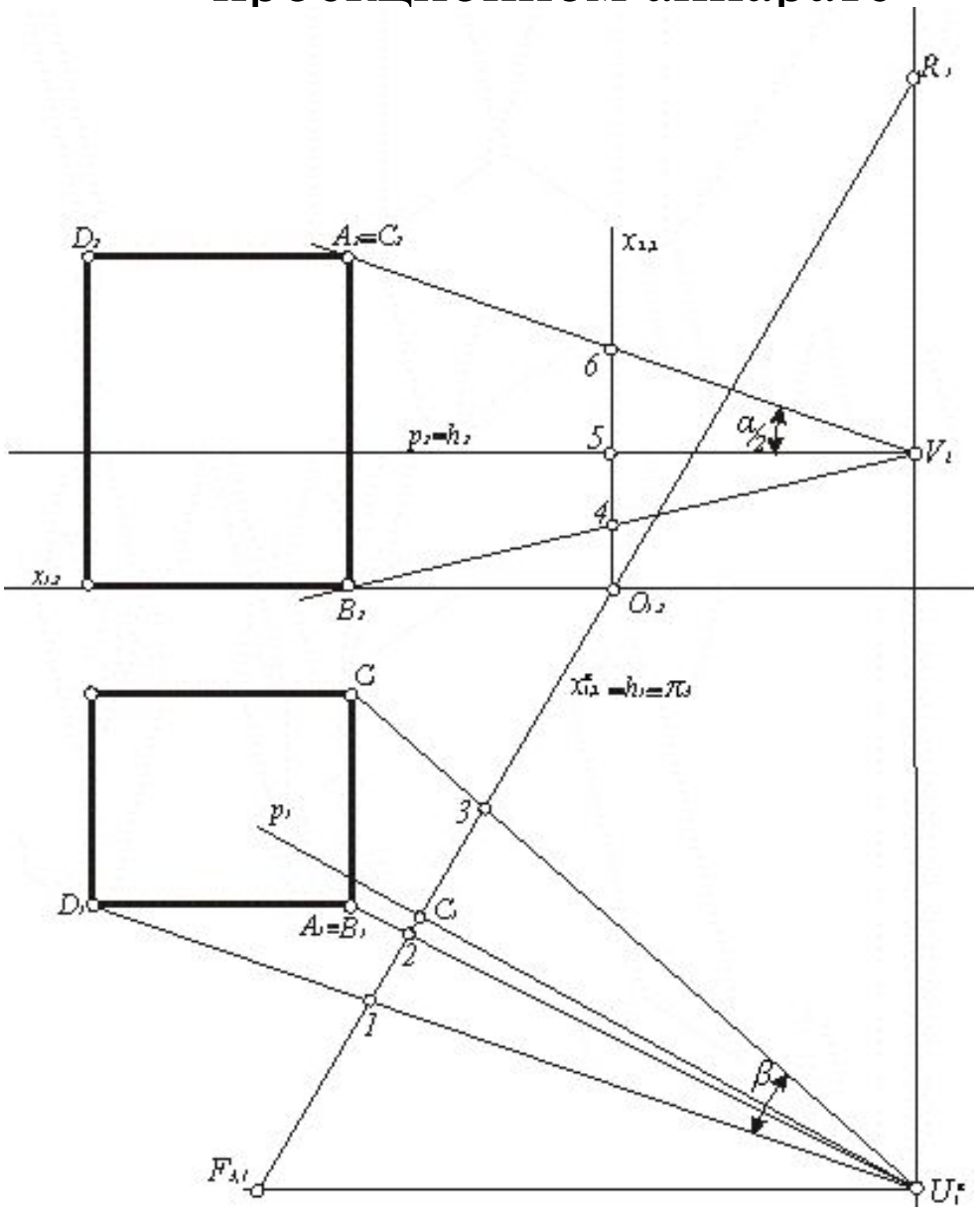
Выбор точки зрения



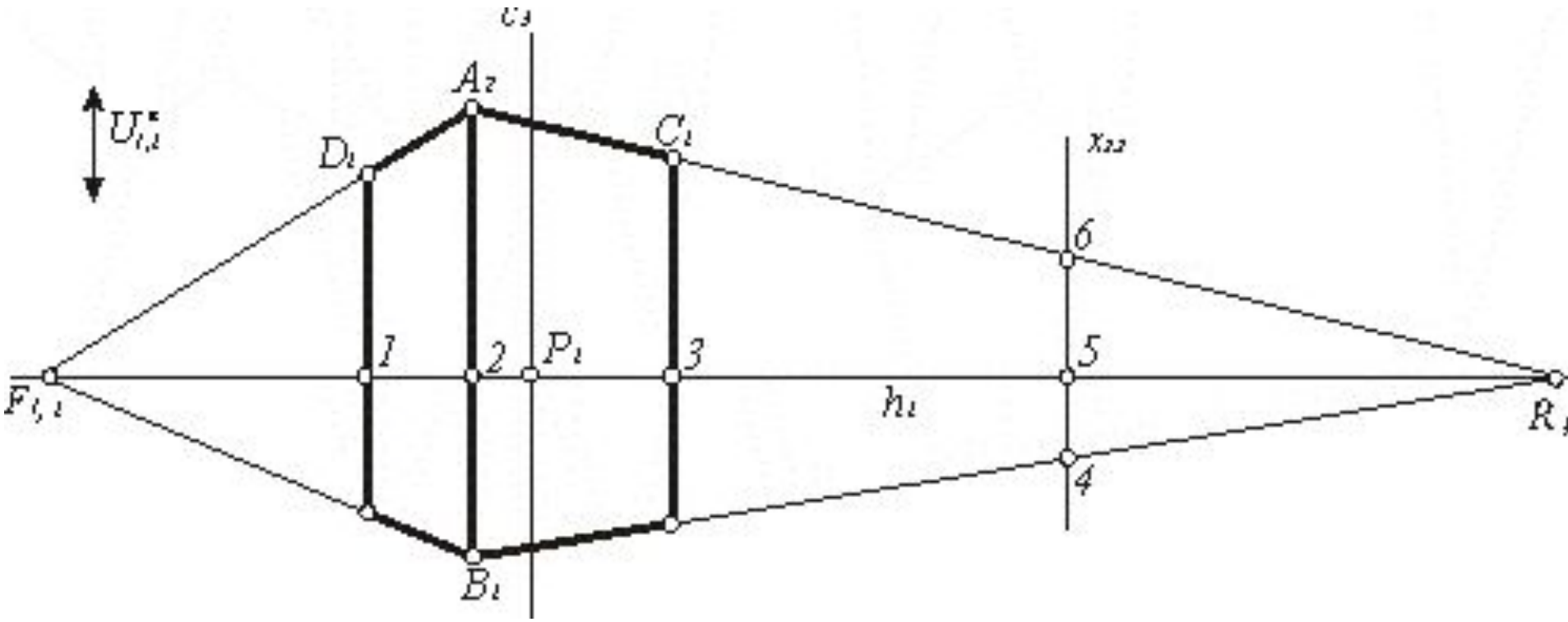
Выбор положения картины $П_2$



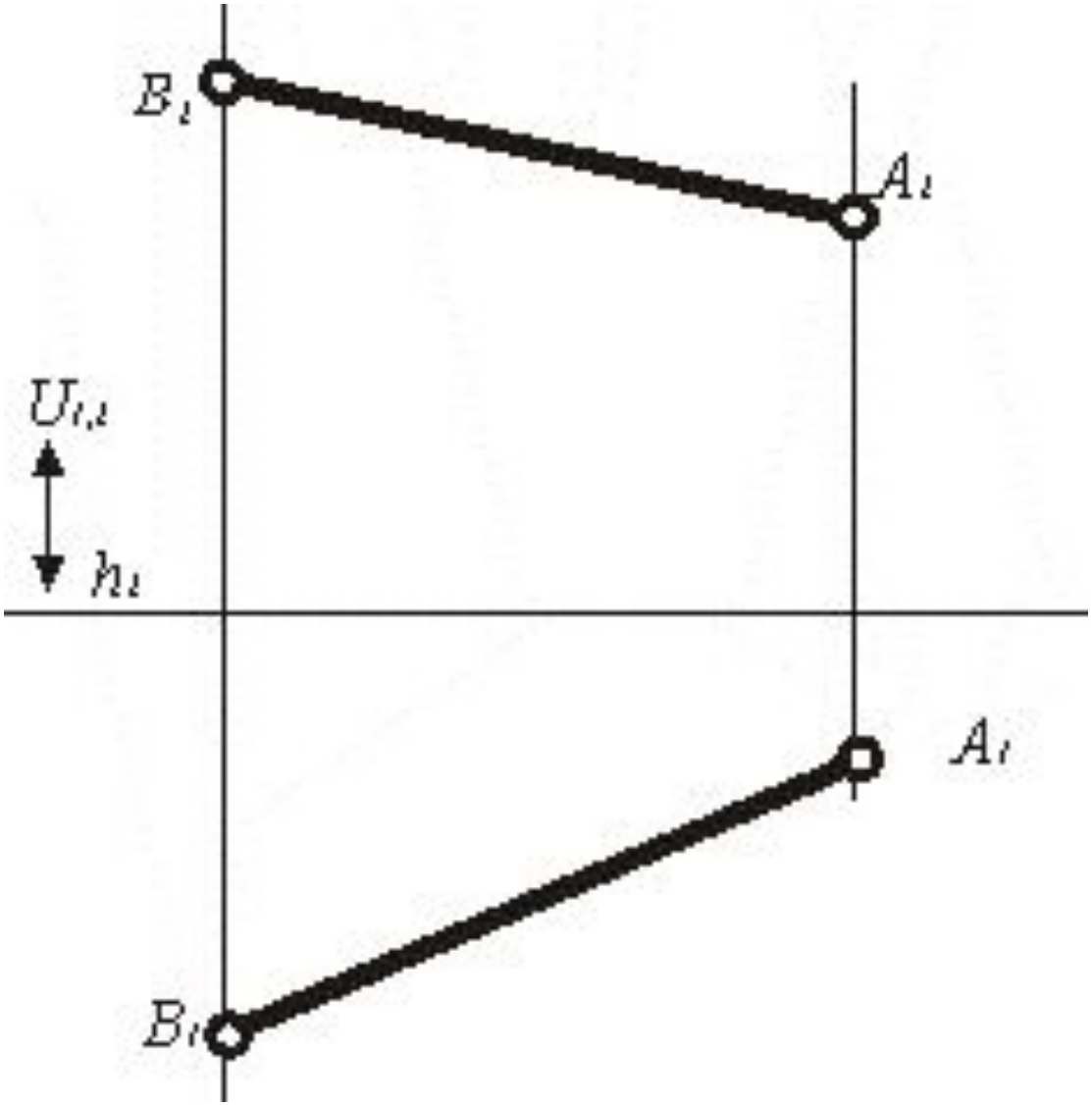
Проецирование каркасных точек на совмещенном проекционном аппарате

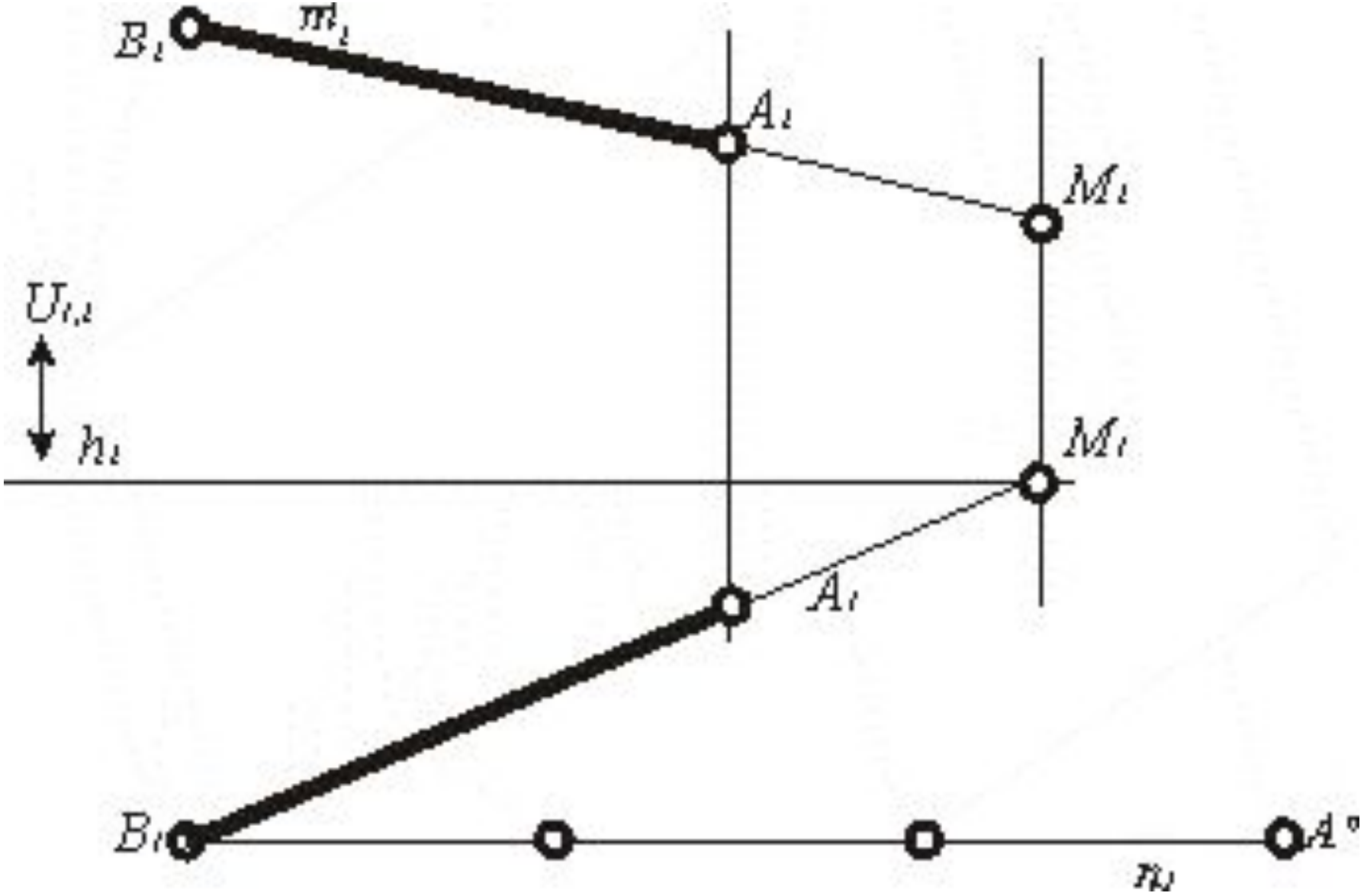


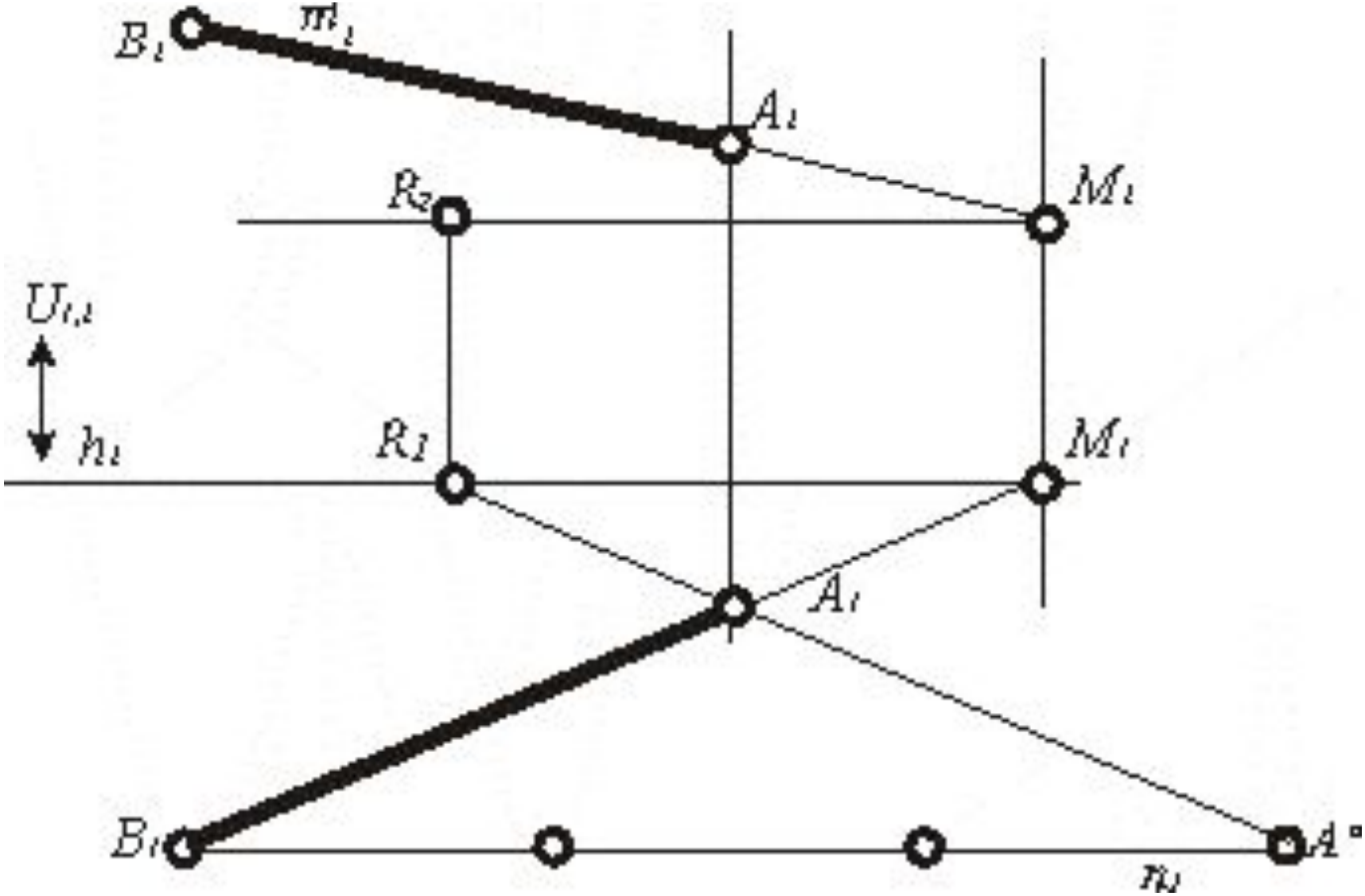
Построение каркаса перспективы объекта

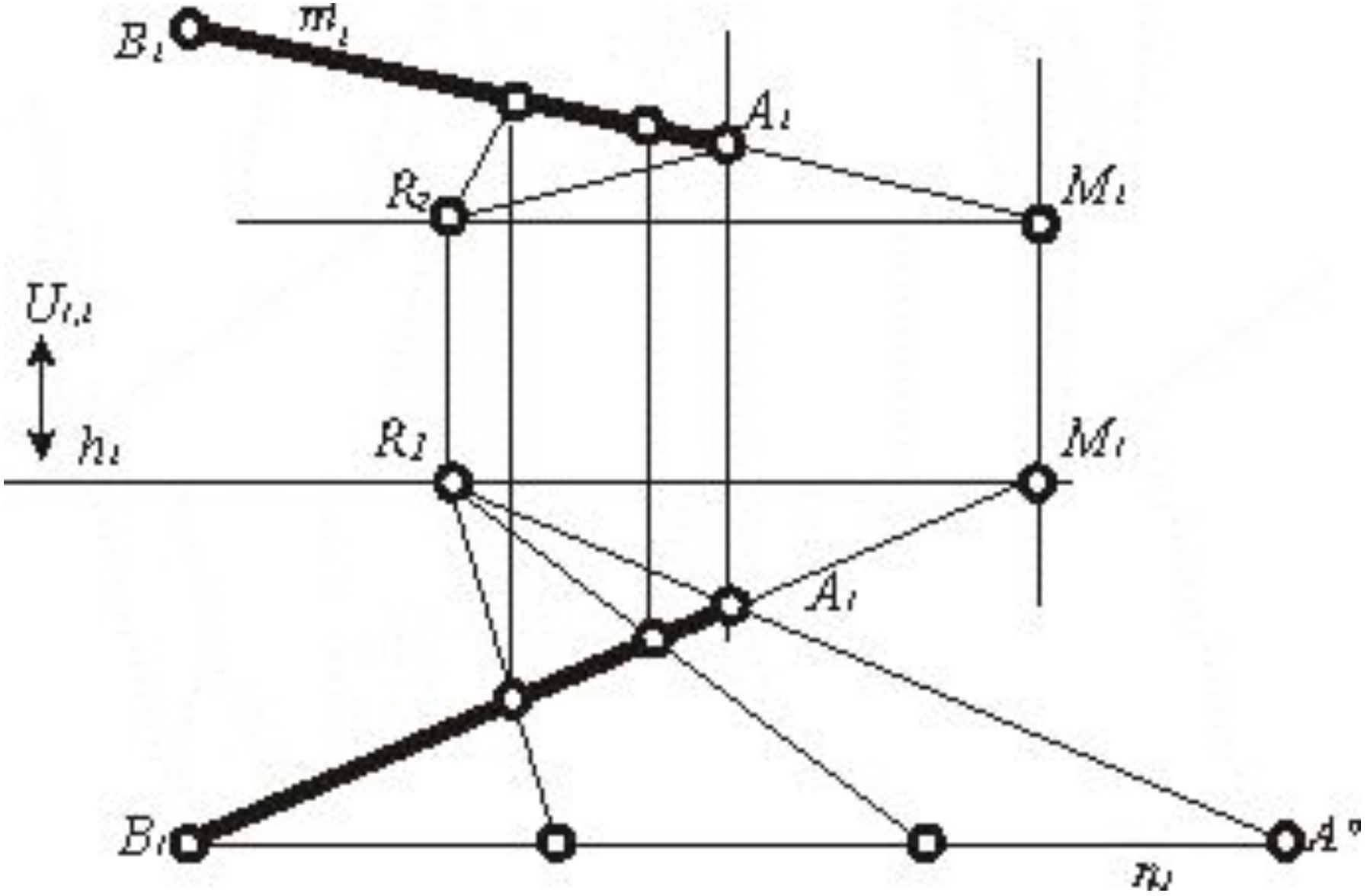


Деление отрезка прямой общего положения в заданном отношении

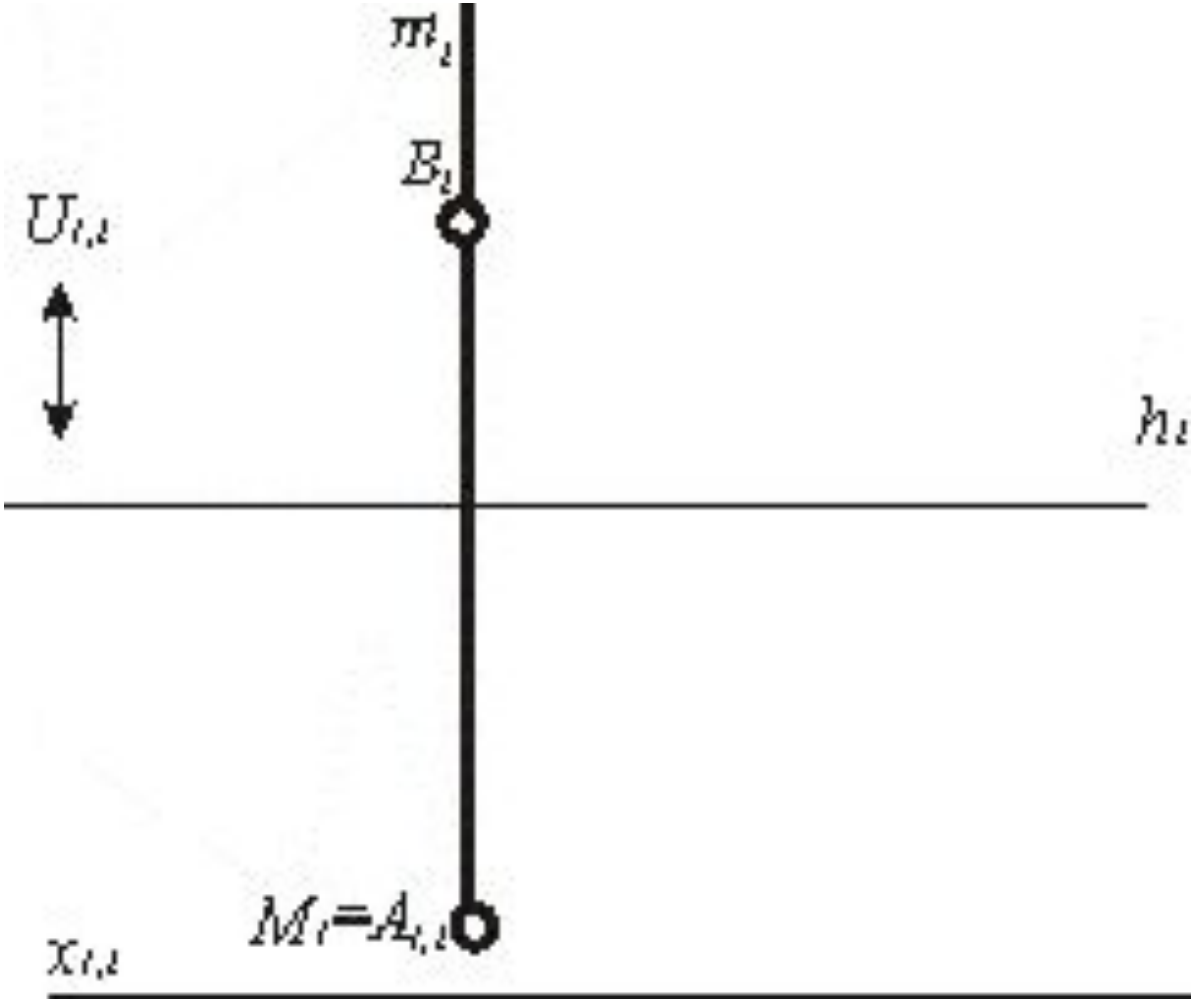


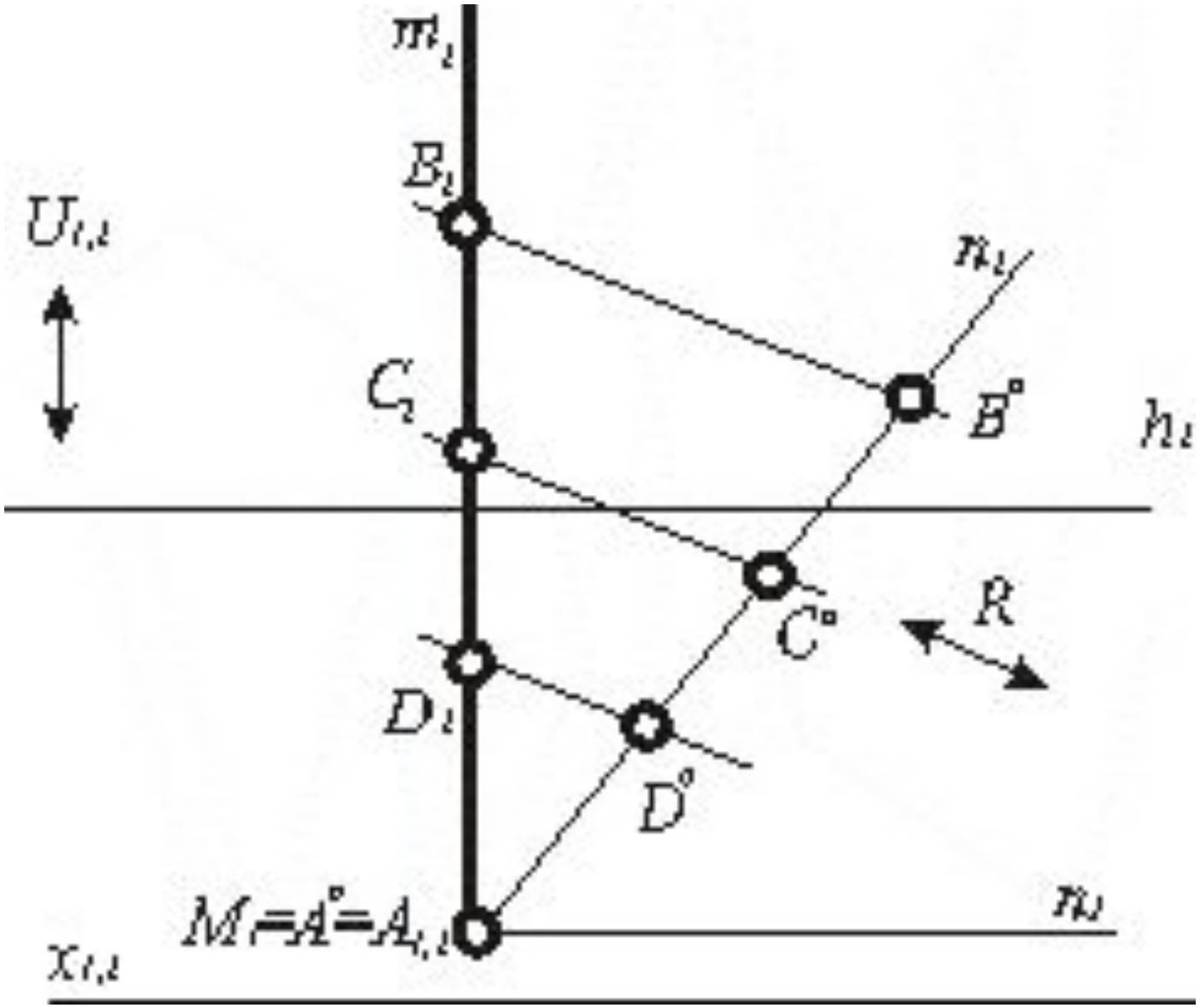

B_1
m_1
A_1
M_1
$U_{1,2}$
h_1
M_1
A_1
B_1
A^0
n_1


B_1
m_1
A_1
R_2
M_1
$U_{1,2}$
h_1
R_1
M_1
A_1
B_1
A_1
n_1

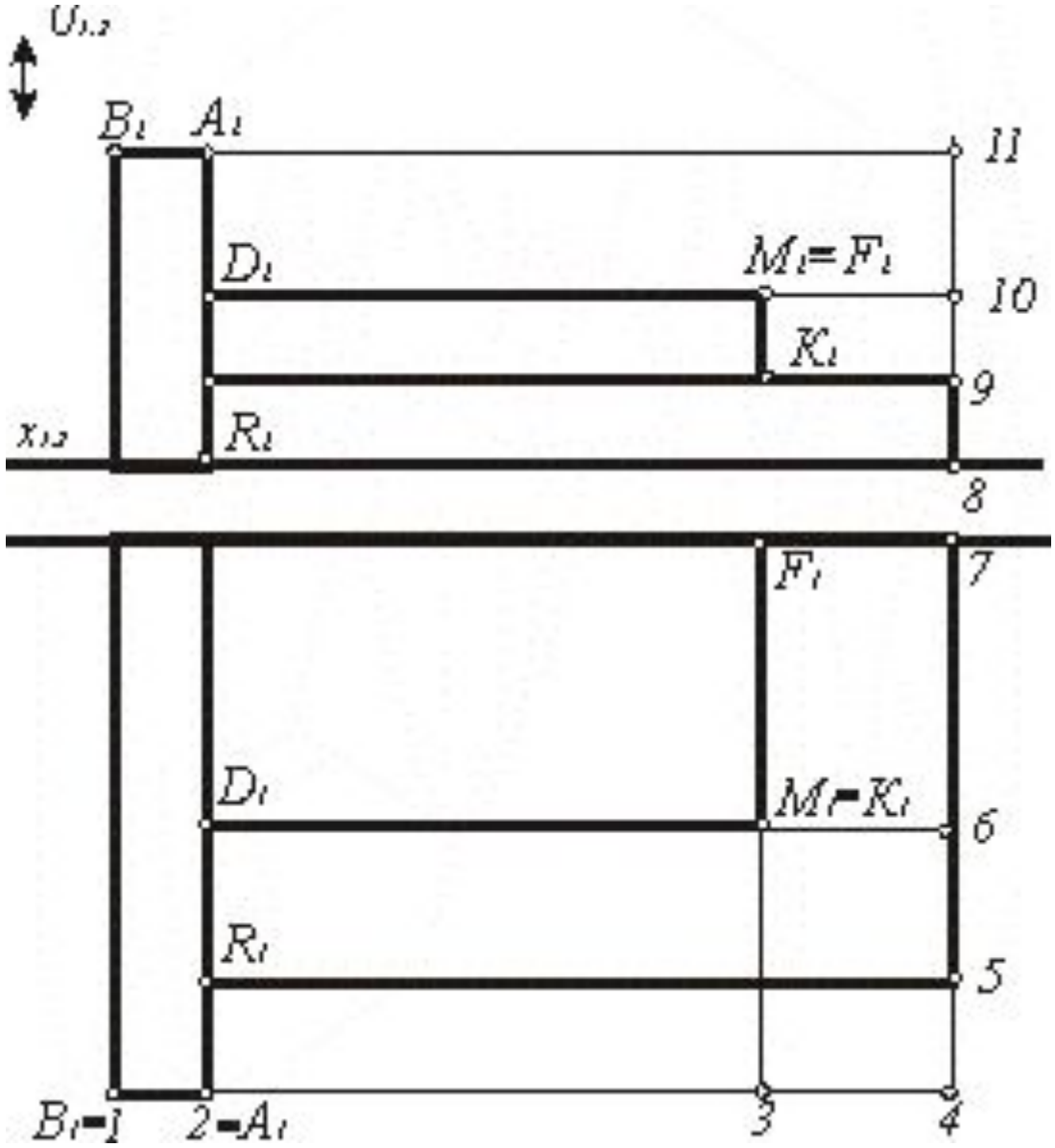

B_1
m_1
A_1
R_2
M_1
$U_{1,2}$
h_1
R_1
M_1
A_1
B_1
A^0
n_1

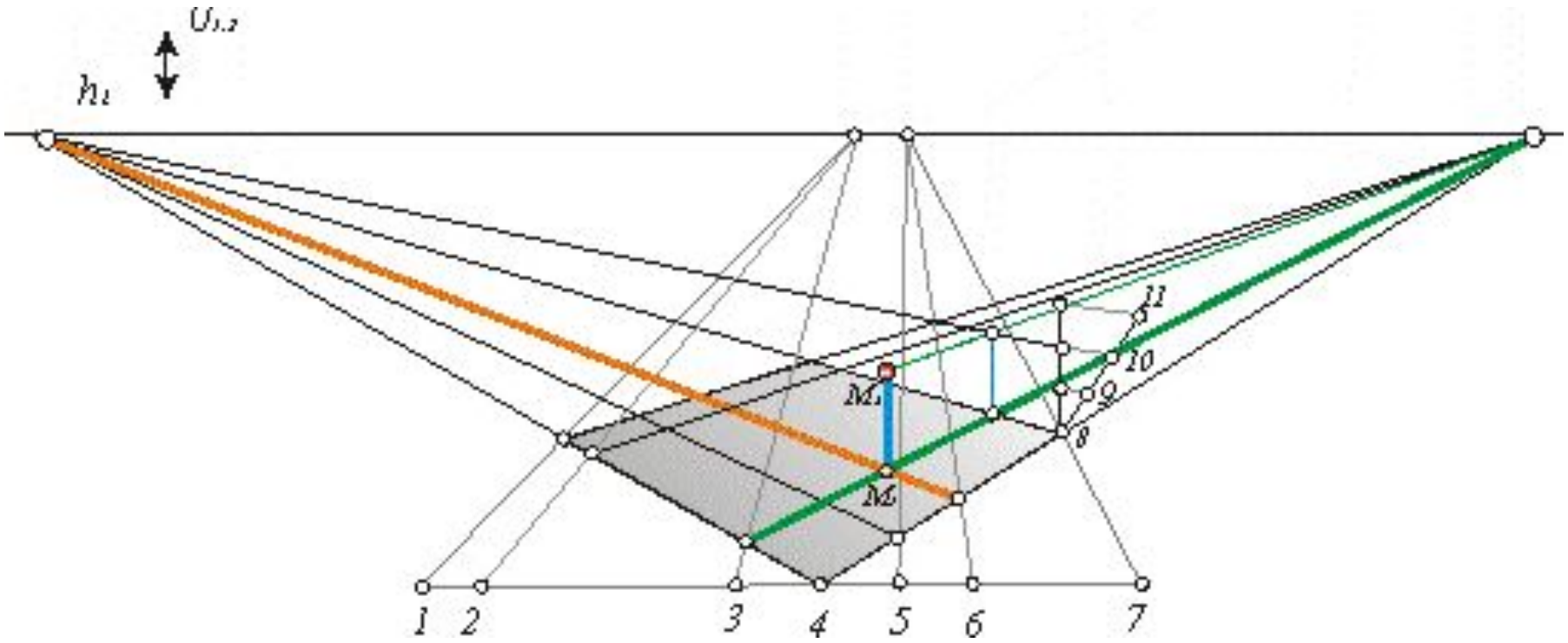
Деление отрезка проецирующей прямой в заданном отношении

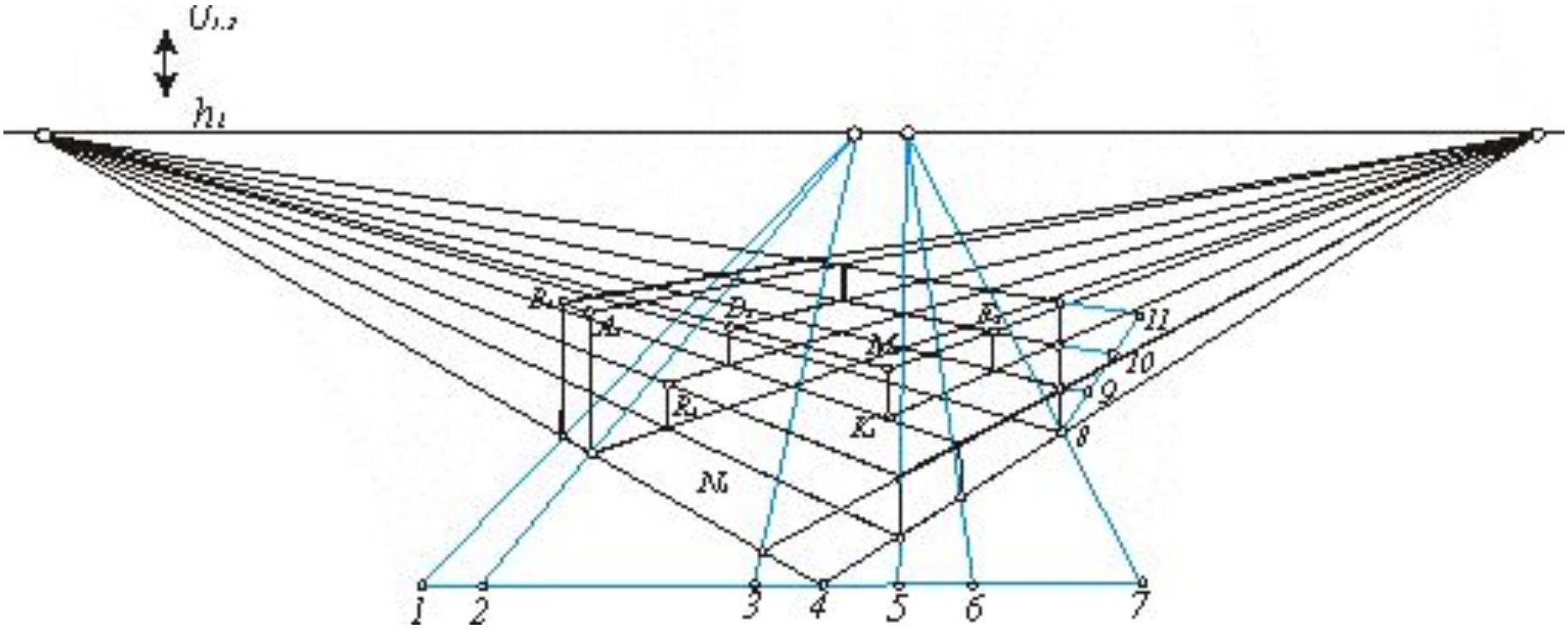



m_1
B_1
$U_{1,2}$
n_1
C_1
B°
h_1
C°
R
D_1
D°
$M=A^\circ=A_{1,1}$
n_2
$x_{1,2}$

Трехмерная оптимальная сетка

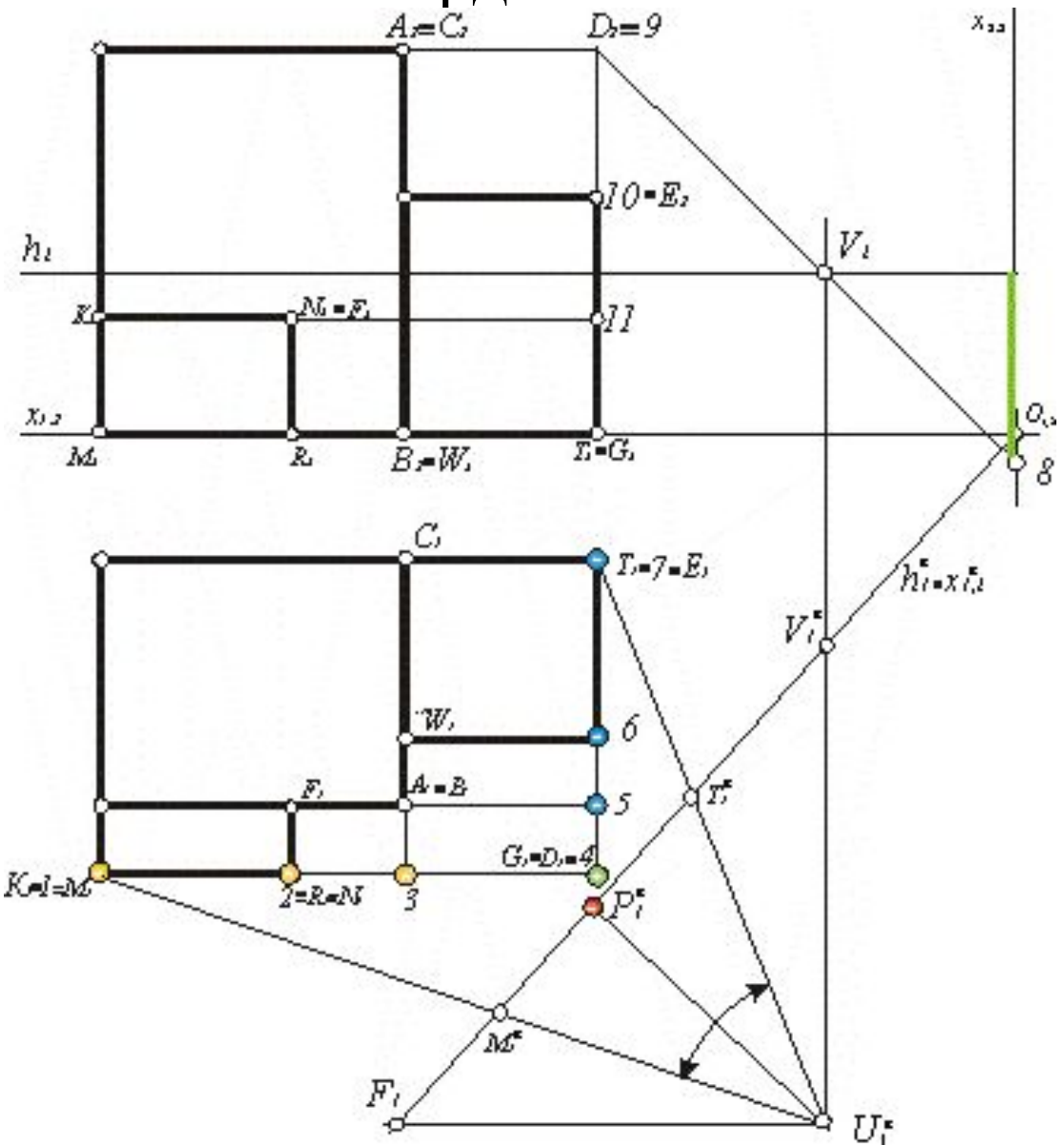


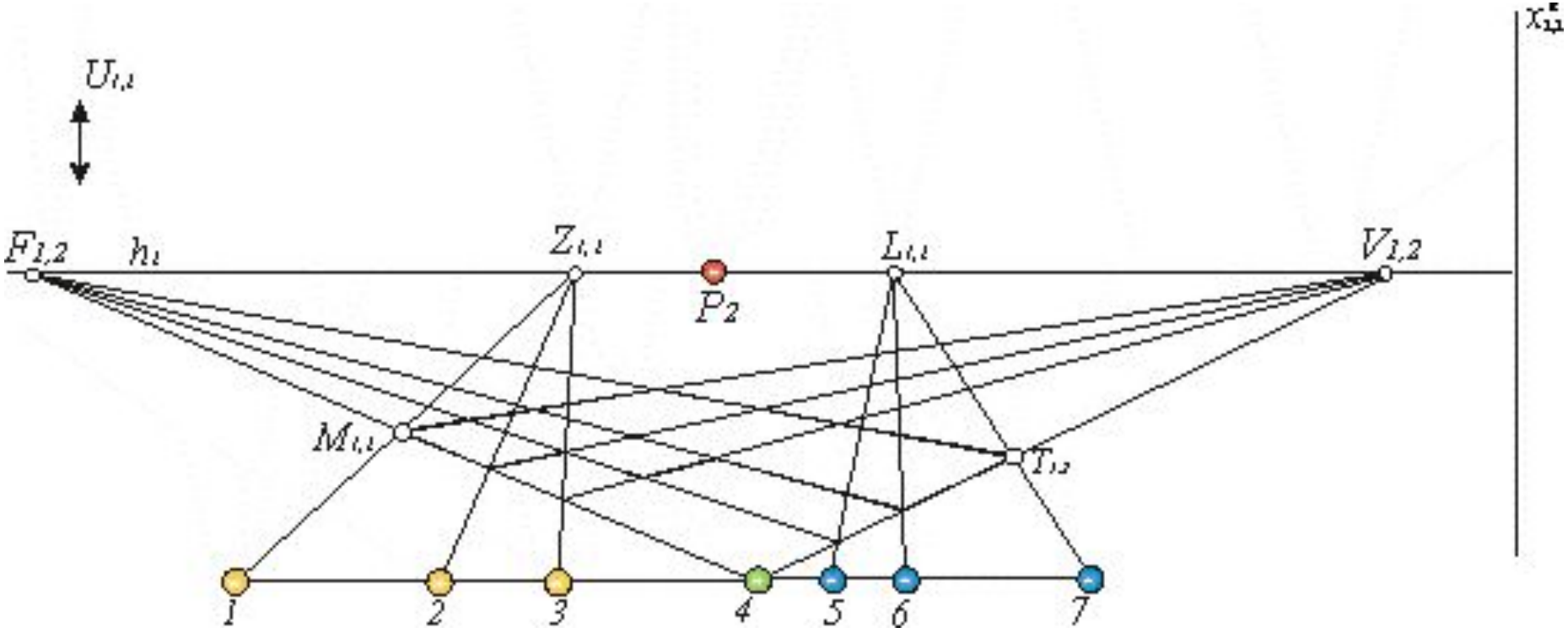

$U_{1,2}$
h_1
M_1
M_2
1
2
3
4
5
6
7
8
9
10
11

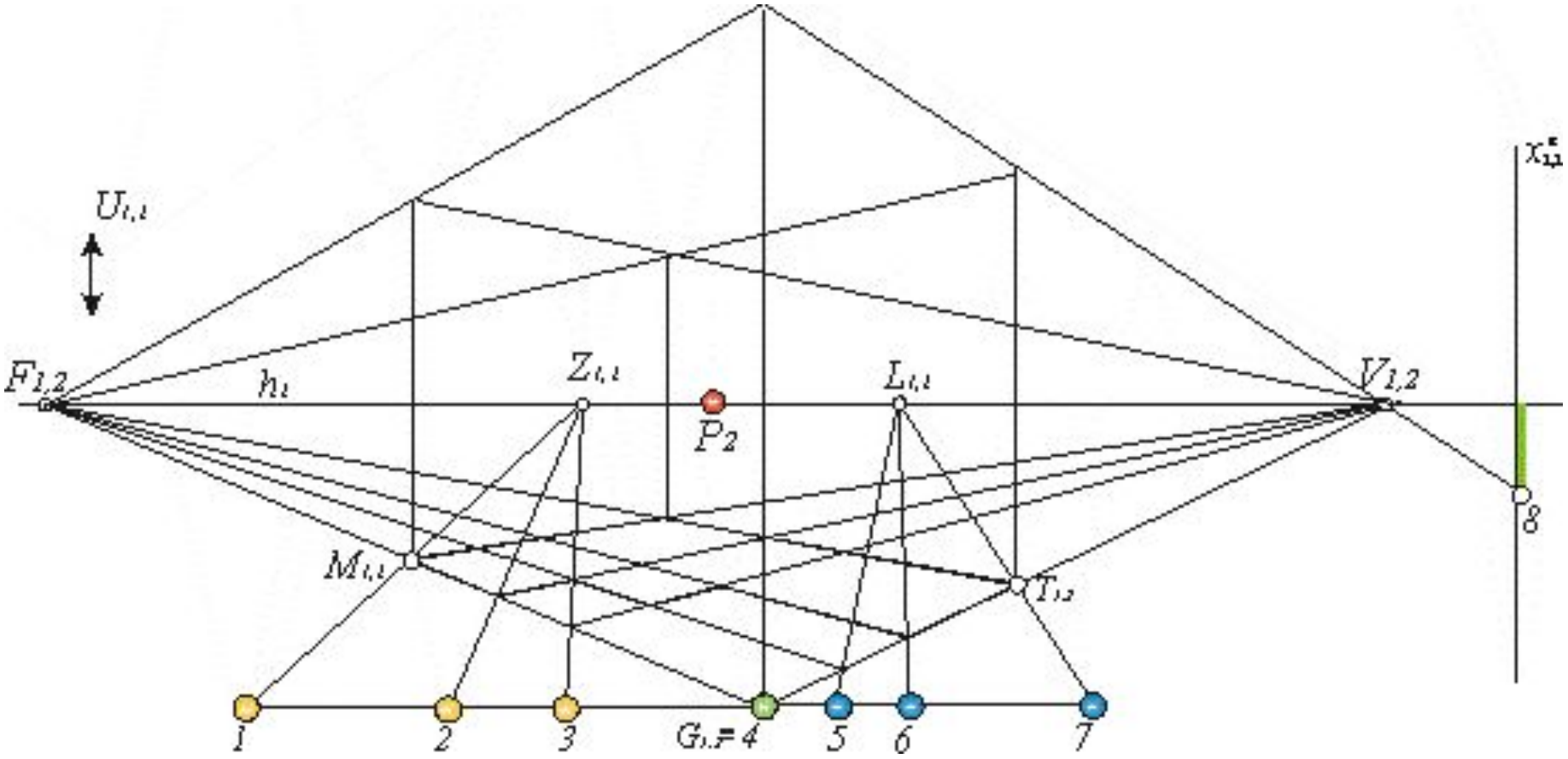


$U_{1,2}$
h_1
R_1
A_1
D_1
M_1
R_2
R_3
K_1
N_1
11
10
9
8
1
2
3
4
5
6
7

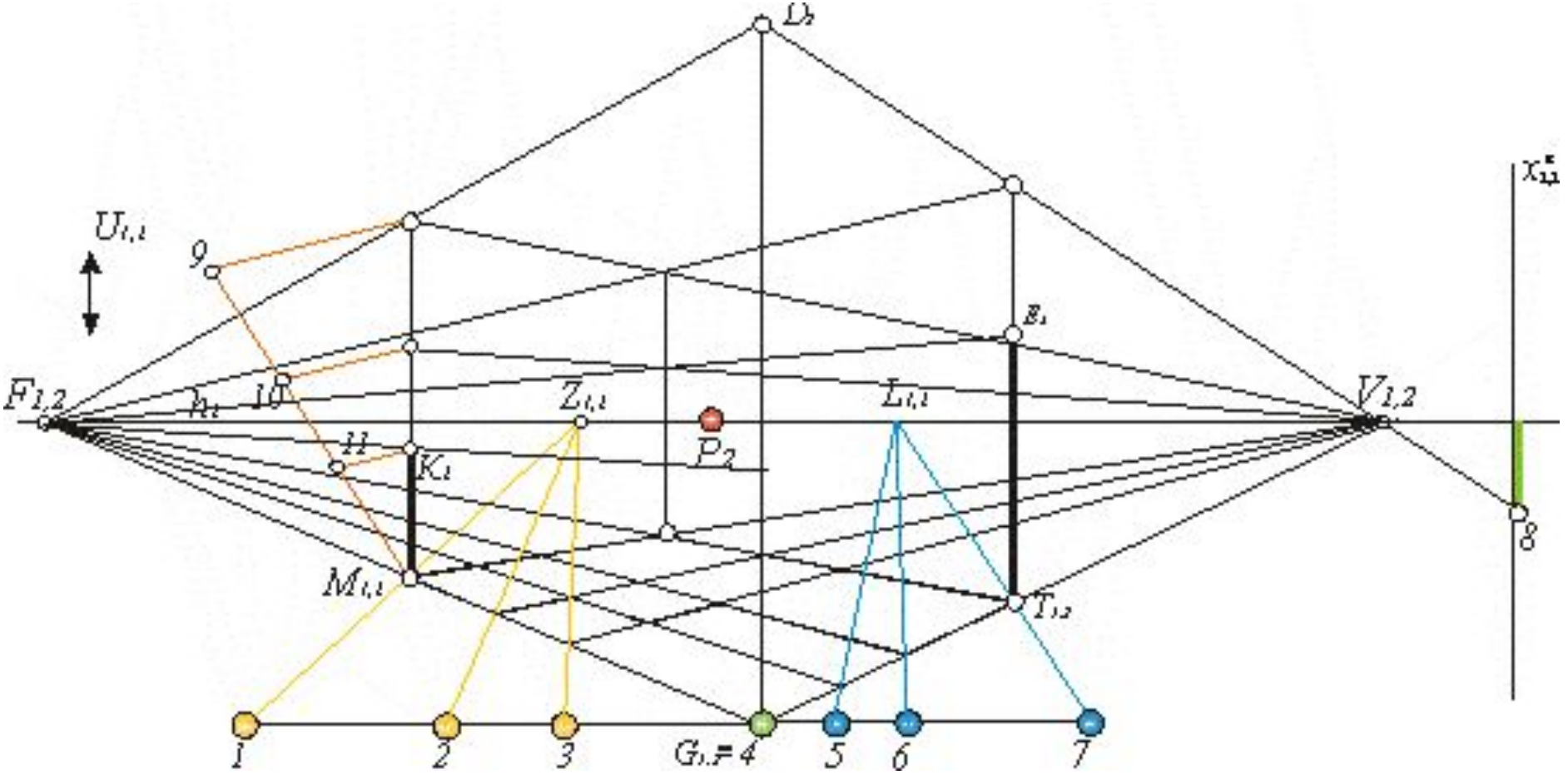
Метод пространственной оптимальной координатной сетки



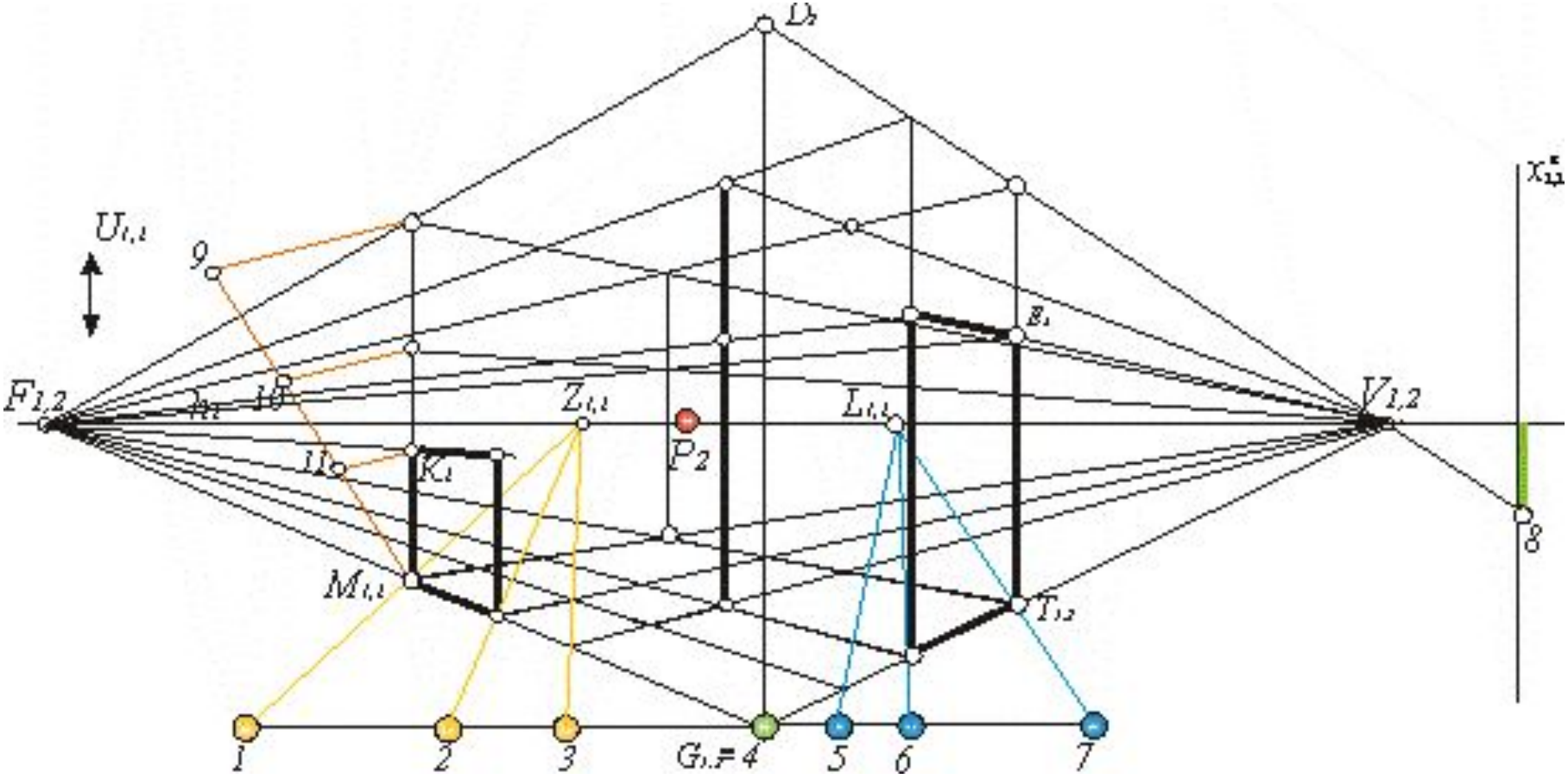

$U_{i,i}$
$F_{1,2}$
h_i
$Z_{i,i}$
P_2
$L_{i,i}$
$V_{1,2}$
$M_{i,i}$
$T_{1,2}$
1
2
3
4
5
6
7

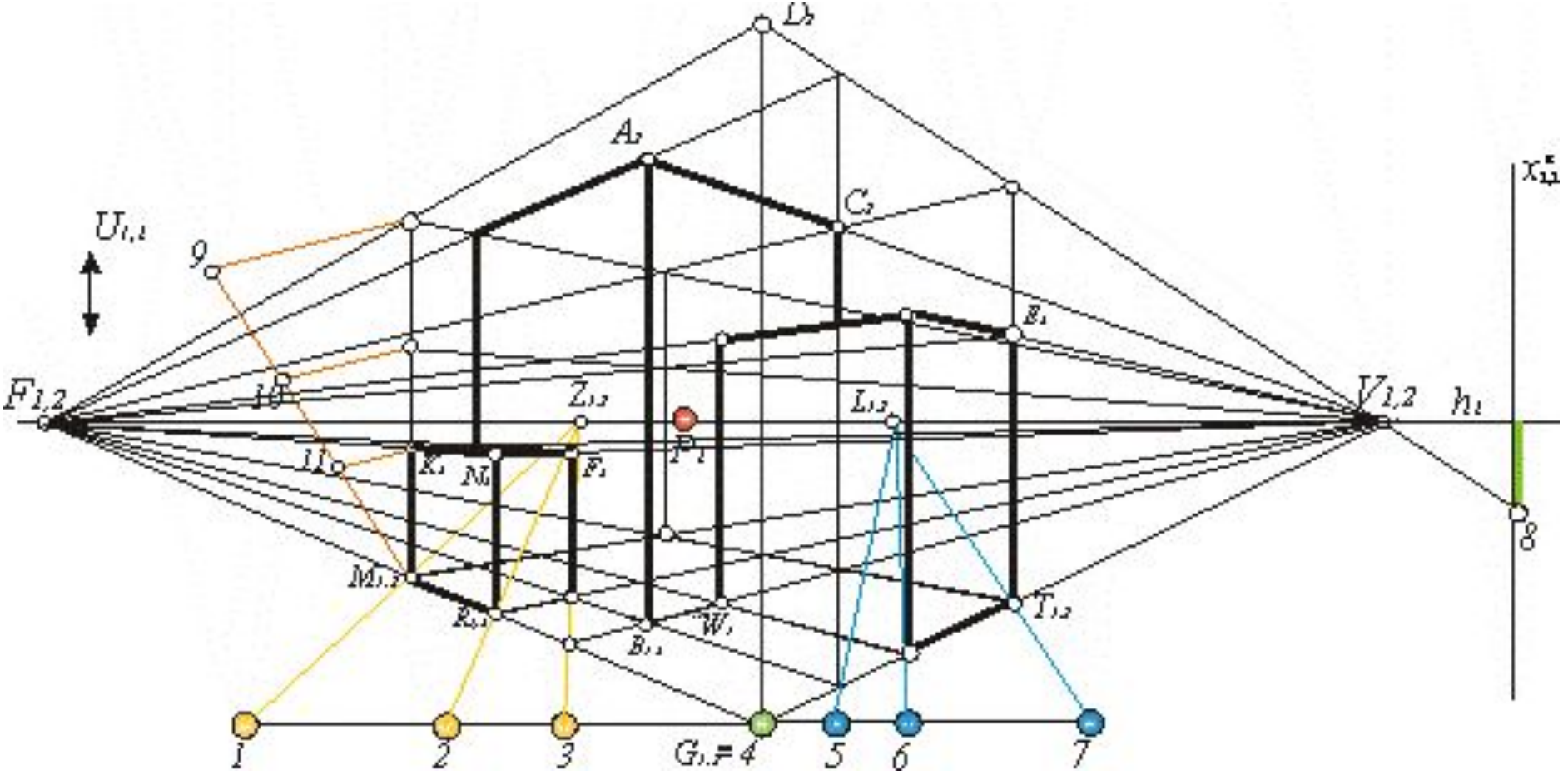


$U_{1,1}$
$F_{1,2}$
h_1
$Z_{1,1}$
$L_{1,1}$
$V_{1,2}$
P_2
$M_{1,1}$
$T_{1,2}$
$x^*_{1,1}$
8
1
2
3
$G_{1,2}$ = 4
5
6
7

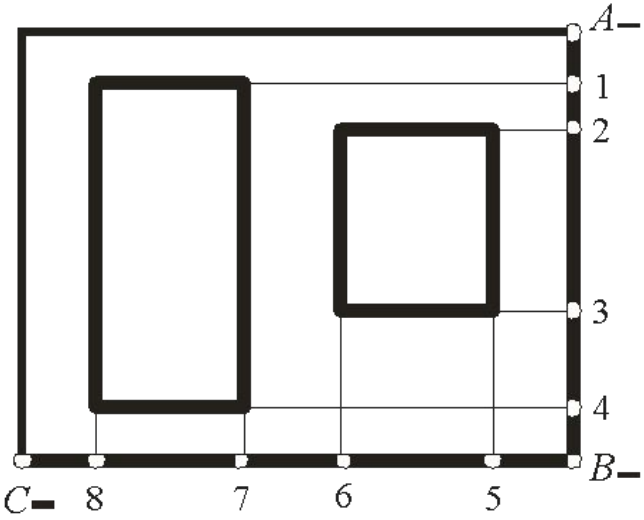


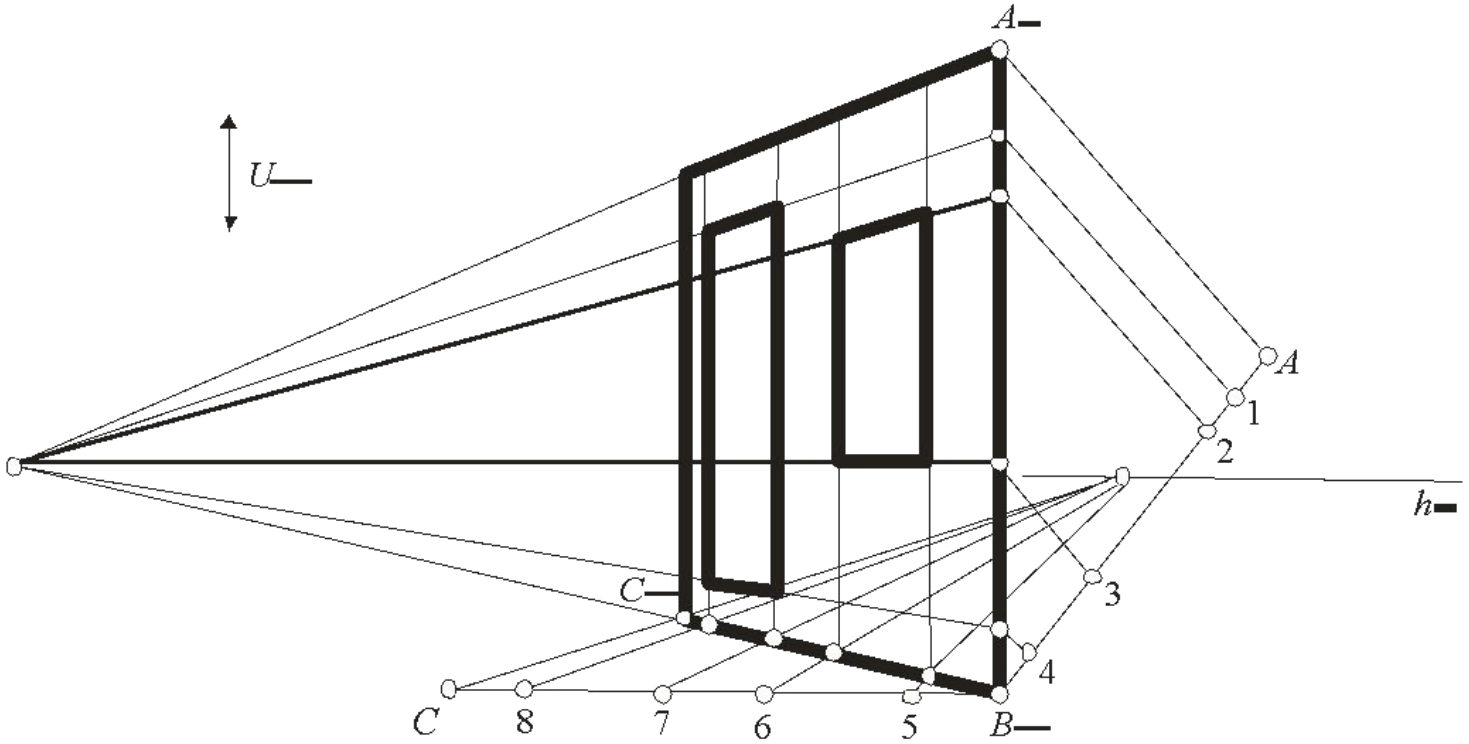
D_2
$U_{1,1}$
9
E_1
$F_{1,2}$
h_1
10
$Z_{1,1}$
$L_{1,1}$
$V_{1,2}$
11
K_1
P_2
8
$M_{1,1}$
$T_{1,2}$
1
2
3
$G_{1,2}=4$
5
6
7

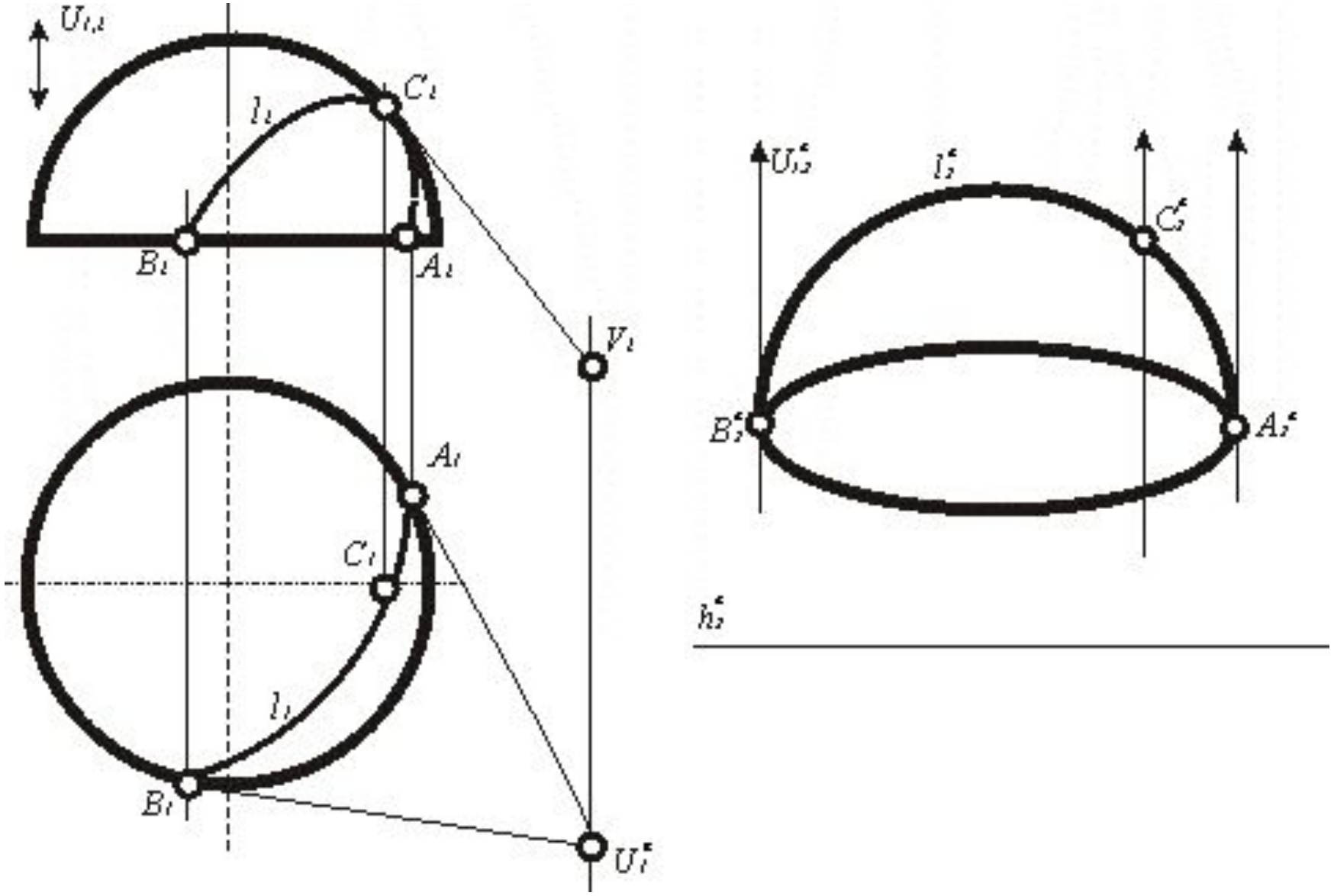

D2
U1,1
9
F1,2
A1
10
11
K1
Z1,1
P2
L1,1
g1
V1,2
M1,1
T1,2
8
1
2
3
G1,F4
5
6
7



D_2
A_2
C_2
$U_{1,1}$
9
B_1
$F_{1,2}$
10
$Z_{1,2}$
$L_{1,2}$
$V_{1,2}$
h_1
P_1
11
K_1
N_1
F_1
8
$M_{1,2}$
$R_{1,1}$
$B_{1,1}$
W_1
$T_{1,2}$
1
2
3
$G_{1,2}$ = 4
5
6
7


A
1
2
3
4
B
C
8
7
6
5


A
U
A
1
2
h
3
C
4
C
8
7
6
5
B


$U_{1,2}$
C_1
l_1
B_1
A_1
V_1
A_1
C_1
l_1
B_1
U_1^c
U_2^c
l_2^c
C_2^c
B_2^c
A_2^c
h_2^c