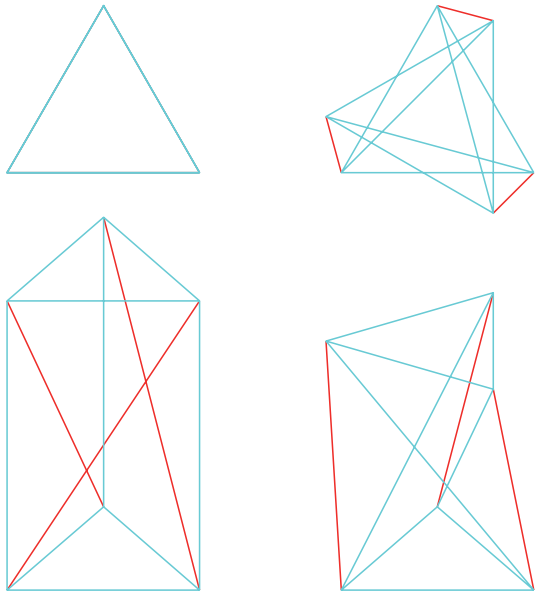

Fig. 10.

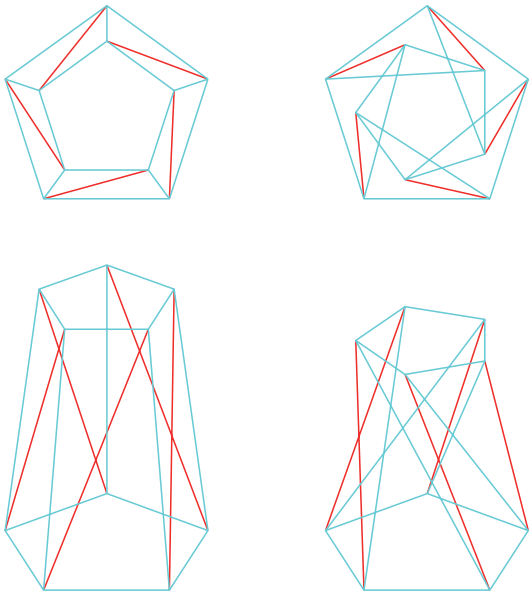

Fig. 11.

Table 2.

Node	Coord-X	Coord-Y	Coord-Z
1	$-s/2$	$-r/2$	h
2	$s/2$	$-r/2$	h
3	0	r	h
4	0	$-2r$	h
5	s	r	h
6	$-s$	r	h
7	s	$-r$	$-h$
8	$-s$	$-r$	$-h$
9	0	$2r$	$-h$
10	0	$-r$	$-h$
11	$-s/2$	$r/2$	$-h$
12	$s/2$	$r/2$	$-h$

Table 3.

Elem	Node	Node
3	4	11
6	5	10
9	6	12
12	7	1
15	8	3
18	9	2

Table 4.

Elem	Area	Length
3	−1.25	1.4563
6	−1.50	1.5654
9	−1.75	1.6297
12	−2.00	1.8555
15	−2.25	1.8875
18	−2.50	1.8884

Table 5.

Elem	Area	Length
3	−1.00	1.7321
6	−1.00	1.7321
9	−1.00	1.7321
12	−1.00	1.7320
15	−1.00	1.7321
18	−1.00	1.7320

the meshes for the initial and final surfaces.

Note that minimizing the total volume results in opposite effects on the lengths of the free edges. It tends to decrease the surface area defined by the triangle elements and consequently tends to increase the lengths of the free edges. It tends to decrease the path lengths defined by the line elements and consequently tends to decrease the lengths of the free edges. In this example, the free edges are curved due to relatively small value for the areas of the line elements.

Example 6: An initially flat square surface with thickness $= 1$, side $= 1$ and two opposite corners displaced by $+1/2$ while the two other opposite corners displaced by $-1/2$. The edges have line elements with area $= 500$. Figure 9 shows the meshes for the initial and final surfaces.

Note that minimizing the total volume results in opposite effects on the lengths of the free edges. It tends to decrease the surface area defined by the triangle elements and consequently tends to increase the lengths of the free edges. It tends to decrease the path lengths defined by the line elements and consequently tends to decrease the lengths of the free edges. In this example, the free edges are straight due to relatively big value for the areas of the line elements.

Example 7: A straight prismoid with height $= 3$. The bottom and top regular triangles are inscribed in a circle of